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## THE OPEN-AIR TREATMENT OF ACUTE PNEUMONIA.

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The aim of all physicians at the present day is to discover methods of rational, as opposed to empirical, treatment. It has been our reproach in the past that we have employed drugs of whose action in the human body we are largely ignorant, and our treatment accordingly has been, and, indeed, is still largely empirical. But we believe that the dawn of better days is at hand. Serum and vaccine therapy is based on knowledge of the pathology and bacteriology of the infections, and although the measure of success which has attended this method of treatment is still not as great as we had hoped, still, in all probability, this is due to faulty technique and improper dosage.

In the treatment of the pneumococcal infection, which we recognize clinically as acute pneumonia, we are dealing with an acute infection, and not primarily with a disease of the lungs, and it is because this aspect of the disease has not been adequately recognized in the past that the high rate of mortality has been an opprobrium on medical men. In estimating the value of any method of treatment we must remember that "post hoc" is not necessarily "propter hoc," and that the *vis medicatrix* nature has always to be taken into consideration. In fact, it is only when some particular method of treatment (unless this is based on true scientific principles) has been adopted in a very large number of cases of that disease that we are enabled to overcome the post hoc propter hoc fallacy, and draw any safe deductions.

Many methods of treatment of acute pneumonia have been advocated from time to time, but no one method has yet been thoroughly investigated, and its true value estimated on scientific lines. We read of the statements of some who advocate the use of potassium iodide and creasote, and other combinations of drugs, and who maintain that their mortality in acute pneumonia treated by these remedies is nil. Such treatment is purely empirical, although we cannot deny the good results which have appeared to follow its adoption. But as Dr. Nathan Raw pointed out, in the discussion on the "Value of Vaccines from the Standpoint of the Physician" at the Royal Society of Medicine in London in March last, "it is extremely difficult, if not impossible, to estimate accurately the value of any particular treatment in pneumonia. In the first place, the type of pneumonia is constantly changing, and in different seasons the virulence of the pneumococcus varies enormously in intensity, so that at certain seasons most of the cases of pneumonia are simple and uncomplicated, running a normal course, and

usually ending in recovery. At other seasons the majority of the cases are of a virulent type from the onset, with marked toxæmia and a high mortality."

Then, again, the estimation of the value of any line of treatment is not to be limited to its power of reducing the mortality rate, but rather it is to be based on a consideration of the reduction of morbidity of the disease. A uniform shortening of the period of illness, a reduction in the severity of the symptoms, and in the number and extent of its complications and sequelæ are of even more value from an economic point of view, than a reduction in the mortality rate, and in dealing with an acute infection such as acute pneumonia, in which there is always a danger of mixed infection, as well as of an extension of the infecting organism to other parts of the body, it is obvious that any method of treatment which can claim to be considered of any value must be proved to be capable of reducing the morbidity, as well as the mortality rate. Although statistical evidence is not yet available to support the view that the open air treatment of acute pneumonia is a really successful method, still it is a procedure based on rational principles, and I believe that in course of time accumulated experience will prove the truth of these statements.

In acute pneumonia not only have we to reckon with a specific infection, but we have to deal with the symptoms which are the direct result of the pulmonary lesion. In consequence of the impaired functional activity of the lung, owing to the consolidation of a portion of the organ and the defective expansion of the chest by reason of the pulmonary or pleuritic pain, we have an imperfect aeration of the blood, and the carbonic oxide content of the blood is always high. Moreover, the pulmonary circulation is impeded with a consequent increased strain thrown on the right side of the heart, and a tendency to dilatation and possible sudden arrest of the heart, if the myocardium be degenerated. In addition to these factors, it must be borne in mind that the consolidated lung is a focus for the manufacture of nucleoproteins, which have an important influence on the phenomenon of the coagulation of the blood, and intra-cardiac thrombosis is one of the dangers which lie ahead in all cases of this disease.

It must be admitted that these pathological conditions are indications for the supply to the patient of as much fresh pure air as it is possible to secure. It has been proved that in even the best ventilated hospital or room the bacterial content of the air is always much higher than that of the outside fresh air; and in a hospital ward where there is, of course, a variety of pathological conditions present, the air is potentially laden with numerous pathogenic organisms. In such an atmosphere the patient with acute pneumonia is susceptible to the invasion of other organisms, or, at any rate, the conditions are most

favourable for the growth of the pneumoceleus. Moreover, the air of a hospital ward is laden with organic impurities which must impair the oxygenating powers of the air respired by the patient. It seems obvious, therefore, that to meet the pathological conditions present in acute pneumonia the open air treatment is the most rational procedure.

Years ago it was the customary procedure at the Royal Prince Alfred Hospital in Sydney to keep the patient with acute pneumonia in the ward with curtains suspended round the bed to keep off draughts, and incidentally to prevent the access of much fresh air. When the patient became very dusky and cyanosed oxygen was administered, and when the heart began to fail alcohol, strychnine and digitalis were used; sedative drugs were also required to allay delirium and secure sleep. For the last seven years it has been my constant practice at this hospital to treat all cases of acute pneumonia in the open air, both day and night. In more recent years it has become the universal practice at this hospital to adopt the same line of treatment, although at first there was some prejudice against it. This fact is an important one, as showing that the other physicians on the staff are now convinced that this is the best method of treatment for this disease.

In view of the accumulation of evidence apparently favourable towards this treatment, I asked my late House Physician, Dr. L. Teece, to be good enough to investigate the hospital case records to see how far these bore out the view that this method of treatment was superior to the older one. It is somewhat remarkable that these statistics, so far as they go, do not show that the mortality rate from this disease has been reduced by this method of treatment. The following is Dr. Teece's report, and I desire here to acknowledge my indebtedness to him for his ready co-operation and valuable assistance:-

"The method of keeping the statistics which was in vogue before 1910 did not enable me to examine in detail the notes of all the cases of lobar pneumonia treated in the past 15 years.

With regard to the statistics as to mortality alone, I find that for the 6 years before the introduction of open air treatment the mortality was 14.14 per cent. For the 6 years after its introduction the mortality was 15.31 per cent. These figures are based on 2000 cases. In this compilation I have omitted the years 1906 and 1907. The open air treatment was first brought into use about the middle of 1906, but was not generally adopted till some 12 months later, and as many of the histories have no note on this point, I thought it safer to omit these years altogether.

I have examined minutely the records of 120 cases—60 before the open air treatment and 60 after its introduction. The former consist of cases under the care of Dr. Wilkinson and Dr. Rennie, the latter under the care of Dr. Rennie. Both series include cases spread over a number of years and occurring at all seasons of the year.

The age incidence in both series is very similar, and both show a remarkable rarity of cases between

the ages of 30 and 40, compared with the statistics as to age incidence generally given.

In the first series every fatal case, with the exception of one, and in the second series every fatal case, either was in extremis on admission or had some serious concurrent disease, such as chronic Bright's disease, or valvular diseases of the heart, or else had serious and multiple complications.

The average age in fatal cases was much higher than the average age of all cases treated, 39 as against 26.26, and 46.12 as against 28.6. Furthermore, the average age in fatal cases treated by open air methods was 7.12 years more than that of the fatal cases not so treated.

The severity of the infection, as instanced by the temperature range, pulse rate, respiratory distress and nervous symptoms, such as delirium, was much the same in both series.

In the first series 7 cases showed complications. In the second series 5. The complications which occurred were empyema, arthritis, both suppurative and non-suppurative, otitis media, pneumococcal, general peritonitis, cholecystitis, parotitis, catarrhal jaundice, acute nephritis and endometritis.

The time the temperature took to reach normal, whether this took place by crisis or lysis, was reduced by the open air treatment from an average of 11.4 days to 9.9 days.

I could not help noting from a general survey of the cases that it was but rarely that the pneumonia of itself killed a healthy adult, in whatever manner he was treated, as in practically every fatal case there was some other factor that turned the scale against the patient.

Apart from actual statistics, a perusal of the histories convinced me that the cases treated by the open air method were quicker in reaching a state of comparative comfort, were less subject to post critical rises of temperature, and showed quicker resolution of the exudate than those that were treated by the old method.

I append the comparative statistics of the two series of cases.

#### Before the Open-air Treatment.

60 cases—45 males, 15 females. Average age of patients, 26.26 years.

Under	10 ..	11 cases.
Age 11 to 20	..	12 cases.
21 to 30	..	11 cases.
31 to 40	..	6 cases.
41 to 50	..	10 cases.
Over	50 ..	5 cases.

There were 5 cases with a well marked history of alcoholism. There were 24 recoveries and 6 deaths. Mortality of 10 per cent. Of those that died 2 had aortic incompetence, another chronic Bright's disease, one had asthma, and another was moribund on admission. The ages at death were respectively—70, 26, 40, 43, 53, and 55—an average of 39.

The highest temperature recorded with recovery was 106°. The highest temperature with death was 107.4°. The average highest temperature was 103.4°.

The average highest pulse rate was 106 (probably incorrect). 5 cases showed marked dilatation of the

heart; two of these died. In many cases there is no record on this point. The complications were otitis media, 2; arthritis, non-suppurative, 1; empyema, 1; catarrhal jaundice, 1; acute nephritis, 1; endometritis, 1. Of these the case of acute nephritis died.

The records as to urgent dyspnoea and delirium are so incomplete that I can compile no reliable figures with regard to these points. The average period from the onset till the time the temperature took to reach normal was 11.4 days, the greatest being 52 days and the least 3 days.

In the fatal cases death took place respectively on the 5th, 7th (2 cases), 9th, and 30 days. In one case this point could not be ascertained.

**Area affected.**—Apex 10 cases, base 39 cases, both lungs 6 cases, whole of one lung 2 cases, not stated 3 cases. Of the cases that died the base was affected in 2 cases, the apex in 2, one was a double pneumonia, and one case not stated.

#### Open-air Treatment.

60 cases—39 males, 21 females. Average age, 28.6.

Under	10 ..	9 cases.
Age 11 to 20	..	15 cases.
21 to 30	..	15 cases.
31 to 40	..	2 cases.
41 to 50	..	12 cases.
Over	50 ..	7 cases.

There were 52 recoveries and 8 deaths. Mortality of 13.3 per cent. There were 3 cases with an alcoholic history; one of these died. Of those that died one was alcoholic, 4 in extremis on admission, and one of these had in addition marked arteriosclerosis. One had hydronephrosis, and in addition had cholecystitis as a complication. One had mitral stenosis with adherent pericardium and pneumococcal peritonitis; the eighth had double pneumonia, double empyema, and suppurative arthritis of the shoulder and elbow joints.

The ages of those that died were 1, 30, 47, 49 (2 cases), 60, 63 and 70, or an average age of 46.12.

The highest temperature recorded with recovery was 105.6°; with death 105.6°. The average highest temperature was 103.26°; average highest pulse rate was 133.

Two cases showed marked dilatation of the heart, one of whom died. There is frequently no record on this point. The complications were empyema, arthritis (both suppurative and non-suppurative), parotitis, cholecystitis, pneumococcal peritonitis. These complications being distributed over 5 cases, 3 of whom died.

There were 4 cases with concurrent diseases, namely, erysipelas, hydronephrosis, mitral stenosis and adherent pericardium, and, lastly, arteriosclerosis; 3 of these patients died.

There were 9 cases of marked delirium and restlessness with 3 deaths.

The average time from the onset of the illness till the temperature was normal was 9.9 days. The greatest time 34 days, and the least 4 days. Of the cases that died death took place respectively on the 5th day in 2 cases, 6th, 11th and 50th. This point could not be ascertained in 3 cases.

**Area affected.**—Apex 5 cases, base 43 cases, whole lung 3 cases, both lungs 9 cases.

Of the cases that died both lungs were affected in 3 cases, the whole lung in one case, the base in 4 cases."

These cold statistics, although they bear out the view that the open air treatment is a distinct improvement on the older method, do not bring out the facts we have learned from experience, that pneumonic patients treated in the open air show much less cyanosis and distress in breathing, oxygen is very rarely necessary, and unless in the presence of some cardiac complications heart tonics are not required. Moreover, the patients sleep better, and it is rarely necessary to resort to sedatives to secure rest and sleep; the tongue is cleaner, the appetite is better, and after the crisis convalescence is rapid. Individual cases of patients who on admission have been extremely ill, some with puerperal complications, have recovered rapidly—cases which we might say would inevitably have died if they had been treated on former lines. To estimate accurately the improvement in all the symptoms which I believe to be due entirely to the open air treatment would, of course, necessitate very full and accurate records kept up for several years, but we have no sufficient records of these details under the older treatment, and a comparison is, therefore, practically impossible.

Our experience, however, is conclusive that the open air treatment of acute pneumonia, which is based on a rational principle, is of immense value. I do not say it is a specific, nor is it likely to cure all cases of this disease, but it is a line of treatment which I think should be generally adopted. It may, of course, be combined with any other treatment by drugs, serums or vaccines.

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#### A NOTE ON THE PROGNOSTIC VALUE OF SCHMIDT'S TEST IN SUMMER DIARRHOEA OF INFANTS.

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(Engl.), etc., etc.

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In a thesis on "Zymotic Enteritis," published at Cambridge (Eng), 1908, I endeavoured, inter alia, to show that this disease was associated with a marked diminution in the secretion of bile. I pointed out that—

1. In the majority of cases that come to the post-mortem room, the gall bladder is very distended, with thick brown bile. The duct leading to the duodenum is very swollen and barely admits the finest hair-probe; it requires considerable pressure to squeeze any bile from the bladder into the duodenum. In two of my cases I was unable to get any flow of bile.

2. The tests for bile remain negative throughout the intestines.

3. The bright green stools of this enteritis are not due as some observers have stated to quantities of unchanged bile, but to a chromogenic organism,

frequently the *b. pyocyaneus* (as shown by Dr. J. S. New, of University College, London). I furthermore showed from a series of over 500 cases that should the proper secretion of bile be restored, and no other complication such as broncho-pneumonia develop, the case invariably recovers. In a future paper and after further research I hope to deal with many interesting matters arising out of these my early investigations. Since 1908 I have been in constant attention upon infants, and have collected over 2000 cases of infantile diarrhoeal disease, but much of my work has been merely academical.

In this brief paper I want to draw the attention of the busy practitioner to a simple test whereby he may watch the progress of his cases. Prof. Adolf Schmidt, in 1906, in his work on Coprology, mentions a test of his own for determining the presence of altered and unaltered bile in the faeces. I have applied that test to cases of zymotic enteritis. Briefly the test is as follows:—A teaspoonful of faecal material is placed in a wide test tube, a little sterile water added, and well stirred with a glass rod. The tube is then filled to four to six times the volume with a saturated solution of corrosive sublimate, the mixture well shaken, and allowed to stand for 12 hours. By this time faeces if normal becomes coloured bright red, showing the presence of hydrobilirubin, or stereo-bilin, but if unchanged bile figments are present the colour becomes green. If no change occurs bile is absent.

In my first series of cases published in 1908 I wrote that "not once did I obtain a positive red reaction until the cured cases had been home some time." The results in my last 200 cases given below are very different, but for that the improvement in treatment is largely responsible. The point I wish to lay stress on is that in over 2000 cases of acute summer diarrhoea I have never lost one in which the Schmidt's test continued, or after treatment became, positive. With as much emphasis I may say that I have never managed to cure one case in which the test continued negative. I have the records of several which were negative for as long as 12 weeks, and then slowly became positive, and with that change put on weight, and made good recoveries. Again a few cases after being negative for some time became positive for a day or two, then relapsed into negative again, and died.

The following figures of my last 200 cases in the Children's Hospital, Perth, may be of interest. I choose these merely because my sister in charge of the Infants' Ward has been good enough to keep a special book for the purpose of recording the Schmidt tests, and so relieve me of the necessity, for this paper, of wading through the histories:—

Discharged with Schmidt's Test Negative	77
Positive	87
Changing to positive	9
Died with Schmidt's Test Negative . . .	27
	—
	200

I give a few actual cases:—

F.P.,

Aug. 12, 16, 19, 26,	Sept. 1
— — — —	— (discharged)

Re-admitted for pneumonia:

Feb. 2, 5	(discharged Feb. 22)
— —	—

V.C.,

June 21, 26, 29	(discharged)
— — — —	—

Re-admitted:

July 7, 9, 13, 19, 23, 27, 31, Aug 3	(discharged cured)
— — — — ? — —	—

L.C., age 3/12, weight 6 lbs. 2 ozs.,

June 28, 30, July 5, 8, 11, 15	(discharged)
— — — —	—

Seen in Sept., weight 12½ lbs., tests —

J.A., age 5/12, weight 9 lbs. 3 ozs.,

June 28, July 1, 5, 9, 13, 19, 22, 27	(discharged)
July 31, Aug. 4, 6, 9, 13, 17, 23	—
— — — ? — — — — — —	—

Weight 10 lbs.

It is not supposed that bile is totally absent from the faeces, nor that Schmidt's Test is in any way delicate. But the test is convincing in that it shows that bile must be secreted in sufficient quantity to give either the green or red reaction before the subjects of zymotic enteritis are able to properly assimilate their food.

### Reports of Cases.

#### EPIDERMOLYSIS BULLOSA.

By R. E. Harrold, M.B., Ch.M. (Ed.),  
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The following case is one of a rare disease. It is obviously a congenital affection, and is characterised by the appearance of bullæ in various situations. The cause of epidermolysis bullosa hereditaria is not known, and no method of treatment has been discovered that affects its course. All that can be done for the patients is to treat the lesions as they appear. Arsenic does no good. The condition was first described in 1879 by Tilbury Fox, and Hallopeau wrote a detailed account of it and its varieties in 1898. Various suggestions have been made in regard to its etiology, but no satisfactory theory has yet been advanced. In regard to the pathology of the disease, while Elliot and others are of opinion that the rete Malpighii is affected, others have described cases in which the whole epidermis was not affected.

In some cases the disease or condition tends to clear up with advancing age, but in others it persists after the age of 60 years. It is occasionally associated with ichthyosis, and scabies, and Klausner recorded a case in 1913 in which it led, in his opinion, to epithelial carcinoma of the tongue. This author regards the congenital hypersensitivity and disturbance in the nutrition of the epidermis and skin as the essential condition, and the bullous eruption as a mere sign of the same.

H. K., female, aged 21, married, has two healthy boys. She was born in South Australia, and had never been out of the State. She had always enjoyed good general health, her only ailments being the rapid formation of blisters on the extremities, which were easily produced by slight pressure or friction. This condition had existed, so her mother informed her, since about the age of 9 months.



The locality of the affection is from the hips to the tips of the toes, the elbows to the tips of the fingers, ears, nose, and roof of the mouth. The condition is most troublesome during the summer months, when all the above areas may be affected—the extremities are always affected. The flexor aspects of the extremities are not affected; the extensor surfaces alone are the seat of the affection. In the case of the forearms the extensor aspect from the elbows to the tips of the fingers are covered with scars, and the skin presents a thin atrophic appearance, almost like white tissue paper, except in areas where recent bullae have been present. In these situations the skin is reddish purple to purple in colour. Other areas are covered with scabs and desquamating epidermis. A large distended blister is present near the elbow. The palms are fissured slightly, and a few pustules are present. The backs of the hands are covered with old scars and recent marks of small bullae. The finger nails are very much affected; some are almost absent, others badly split and fissured longitudinally; all of them are very much disorganized. The flexor aspects of the legs from the knees to the tips of the toes are involved except at the ankle. Strongly marked evidence of old and recent lesions, caused by the pressure of boots or shoes, is seen completely circling the joints. On the left knee is a very extensive bullous lesion, filled with a clear straw-coloured fluid—not haemorrhagic. The patient says, however, that the contents of the blisters are often blood-stained. The bullae is 5 inches by 3 inches in size. The mouth is now free of bullae, but the mucous membrane covering the hard palate is thickened and very rugose and hypertrophied. Both sides of the nose and the ear show evidence of fairly recent lesions. All the toe nails are absent. The lesions never inconvenience the patient to any degree. The slightest pressure which is sustained for any length of time will cause a lesion, such as kneeling or resting the elbows on a hard surface. The application of heat, such as the immersion of the hands into hot water, will be followed by swelling, and at the expiration of five or six hours blisters appear, so that the patient cannot do many of her ordinary domestic duties. The rays of the sun in hot weather produces bullae on the ears and nose. The lesions are not preceded by itching, and the only sensations produced are present during the stage of healing, when they itch slightly, and have an aching feeling. The lesions soon heal, except on the shins, where they take longer to heal. I have to thank Dr. R. H. Pulliene for

having sent the patient to me, and also for the photographs of the lesions. No trace of a similar affection can be discovered in the patient's family.



#### HYDRO- AND PYO-NEPHROSIS.

By **S. Harry Harris, M.D., Ch.M.**,  
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#### (1) Hydronephrosis and Unilateral Coli Bacilluria following Pyelitis of Pregnancy.

N.F., aet. 26, married, was sent to me by her doctor on July 31, 1914, with the following history:—The patient was delivered of a full-term child 17 months ago. During the last 10 weeks of gestation she suffered from a severe attack of pyelitis on the right side. She was treated medicinally in hospital for six weeks. The temperature was raised during the greater part of this period, and on several occasions induction of labour was advised. This the patient refused. She eventually recovered sufficiently to return home, where she was delivered at a later date of a healthy child. Fifteen months after delivery she still complains of a

persistent ache in the right loin and back, and of frequent and precipitate micturition. The lastnamed symptom is marked during the daytime, and the nocturnal frequency averages three times. She suffers from exacerbations of the pain, especially during menstruation, when she is incapacitated for several days. *Bacilli coli communis* have been found in the urine. She has lost considerably in weight, and suffers from malaise and frequent headache.

On ureteral catheterization, the right renal pelvis and ureter were found to contain one ounce two drachms, and the left two drachms. Both specimens were macroscopically clear. A pyelogram was taken by Dr. J. G. Edwards, and showed a typically dilated pelvis and ureter on the right side, with obstruction at the level of the transverse process of the last lumbar vertebra. Neither a No. 7 nor a No. 6 (French) catheter could be passed beyond this point, but a No. 5 slipped through without difficulty. A No. 7 catheter was passed without difficulty to the left kidney.

The pathological report on the urine by Dr. Tebbutt recorded the presence of numerous coliform organisms, a few leucocytes and transitional epithelial cells in the urine from the right kidney; the urine from the left side was sterile and clear, except for a few transitional epithelial cells.

The patient was catheterized each week for a period of four weeks, the catheter being left in situ for from 6 to 10 hours on each occasion. Four drachms of a 2 per cent. solution of protargol were injected twice during each catheterization. At the second catheterization a No. 7 (French) catheter was passed as far as the pelvis without difficulty. The pelvic capacity was found to be reduced by two drachms. The pain, frequency of micturition and headaches had also disappeared after the first catheterization, and there was progressive improvement in the general condition. No further reduction of the pelvic capacity was effected. Six weeks after the fourth treatment the patient was again examined, and from the urine obtained from the right kidney a very scanty growth of *b. coli communis* was cultured. She had increased by 7 lbs. in weight since the beginning of the treatment, and was feeling well in every way. She stated that she "was able to sit out a theatre or picture-show with comfort, the first time since baby was born."

#### (2) Pyonephrosis following Pyelitis of Pregnancy of 17 years' duration.

M. C., aet. 38, married, was admitted to the South Sydney Women's Hospital on September 12, 1914. She complained of backache and frequent painful micturition for the past 17 years, dating from her first confinement. Her Lodge Dispensary book showed that she had been treated with a variety of urinary antiseptics and sedatives during the greater part of this period, without apparent improvement. She was in the twentieth week of pregnancy when admitted. She was hollow-eyed and emaciated; her skin was of an earthy pallor. Her temperature and pulse-rate were normal. Examination revealed some slight tenderness on deep bimanual compression of the area of the right kidney. The kidney, however, could not be felt. There was more marked tenderness on pressure over the right iliac and bladder regions. A cystoscopic examination showed a bladder loaded with adherent pus, prolonged irrigation being necessary before any landmarks became visible. Pus was then seen issuing from the right ureteral orifice in the form both of turbid spurts and of occasional thick curdy masses. The right pelvic capacity was one and a half ounces, and the left two and a half drachms. There was no indigo-carmine excretion by the right kidney within 30 minutes, while the left kidney excreted a dark blue in 15 minutes. According to the pathological report on the condition of the urine, the right kidney yielded an opalescent specimen, containing colon bacilli (determined by culture). There was a large quantity of pus and a moderate quantity of blood cells. The urine from the left kidney was clear; a few pus cells and some *bacilli coli communis* were found.

The patient was emphatic that the present pregnancy had not altered the previous condition of things in any way, a statement which her doctor confirmed. It was, therefore, decided that a nephrectomy should be performed without interfering with the pregnancy. The kidney was de-

livered through an incision in the loin. The ureter and pelvis were so thinned as to be almost transparent; they had a glistening surface with a fine mesh-work of vessels, resembling to a striking degree the appearance of a sublingual ranula. The ureter was of the circumference of an ordinary middle finger. The kidney was elongated, and had a "four-finger" pelvis, and showed marked flattening of the papillæ, and almost total disappearance of the calices. The cortex was less than an inch in thickness.

It is now three weeks since the operation. The pain and frequency of micturition have disappeared, and the urine is macroscopically clear. The patient states that she is free from discomfort, the first time for 17 years.\*

#### Epicrisis.

These two cases afford a useful commentary on the laissez-faire methods commonly adopted in the treatment of pyelitis of pregnancy. Even in its severer grades this condition rapidly yields to efficient ureteral catheterization. Several cases of a nature similar to the above have come under my observation within the past few months, and it would seem that such sequelæ are considerably more common than the practitioner is apt to believe.

To ensure success in the treatment especially of the more serious cases of pyelitis of pregnancy, it is important that the catheter be left in situ for several hours, and that a catheter of as large a bore as possible be used to facilitate thorough emptying of the renal pelvis. Protargol solution may be injected with advantage at intervals; the quantity should be considerably less than the measured capacity of the renal pelvis. I have treated in this way upwards of 50 cases of this kind at stages of pregnancy varying from the 14th to the 36th week. In only one case was the treatment of no avail; the catheter was obstructed about six inches from the bladder in this case, and labour had to be induced. Some of the patients were practically in a typhoid state before active treatment was instituted, but in every case, without exception, relief of pain followed the catheterization immediately. The temperature and the pulse-rate began to fall within 24 or 48 hours. In the majority of the cases the temperature and pulse-rate had reached the normal line on the third day, and in no case was this delayed beyond the first week. In only eight cases was more than one catheterization required. Practically all cases of this category admitted to the South Sydney Women's Hospital are now treated in the manner described.

#### (3) Pyonephrosis due to Stricture of the Ureter by Tuberculosis of the Appendix.

M. P., aet. 32, married, had suffered from pain in the right lower quadrant of the abdomen for 21 days before coming under observation on August 22, 1914. Her previous health had been good, except for an attack of what had been termed "worm fever," at the age of 17 years, during which she had been confined to bed for six or seven weeks, and which, viewed in the light of after events, may be considered to have been due to mesenteric tuberculosis.

The pain complained of was stationary and fairly well localized just above and to the right of the symphysis pubis. Although it had not been very severe at any time, it had prevented the patient from performing her household duties, and was described by her as a feeling as "if something wanted to burst inside." There was pain at the end of the act of micturition, and increased frequency; there was no constipation. The temperature and pulse were normal.

On abdominal examination tenderness was found just above and to the right of the symphysis pubis. There was some slight renal tenderness on the right side, but the kidney was not palpable. On vaginal examination there was tenderness on pressure over the region of the right ureter, which felt hard, and enlarged to the size of a lead pencil. It was this in the first instance which cast doubt on the diagnosis of appendicitis, and led to a suspicion of an impacted ureteral calculus. The bladder urine was clear.

\* At the present time (October 26) the patient is in the 26th week of pregnancy. The bladder urine is sterile. She has gained nearly a stone in weight since the operation.

Ureteral catheterization revealed an obstruction on the right side  $1\frac{1}{2}$  inch from the bladder. Neither a No. 7 nor a No. 6 (French) catheter could be passed beyond this point. A No. 5 slipped past the obstruction, and penetrated for  $7\frac{1}{2}$  inches, where it was again arrested. Some turbid, purulent urine was drawn off. The pelvic capacity was one and a half ounces. A No. 7 catheter reached the left pelvis without obstruction. There was no indigo-carmine excretion from the right kidney in half an hour, while dark blue urine was collected from the left side in 12 minutes. An X ray examination by Dr. Sear showed two shadows.

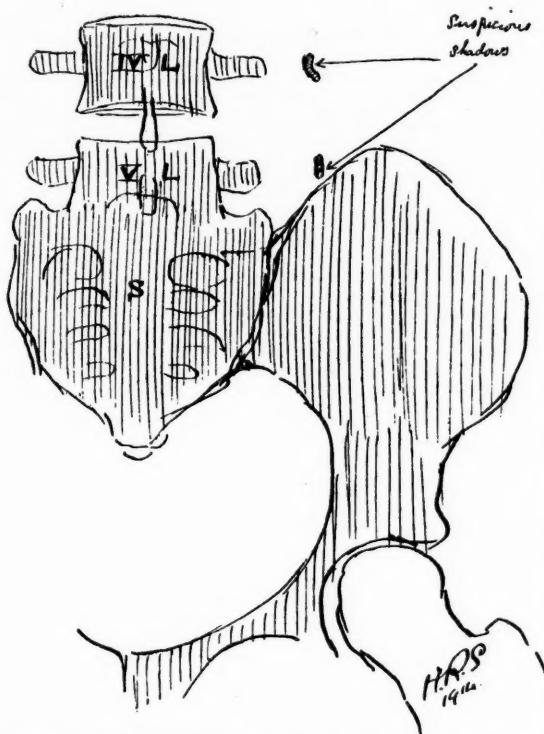


Fig. I.—First X-ray photograph, showing Suspected Calculi of Ureter.

opposite the bodies of the fourth and fifth lumbar vertebrae (Fig. 1), in approximately the normal position of the ureter. This apparently clinched the diagnosis of ureteral lithiasis. A uretero pyelogram, however (Fig. 2) was taken after the injection of one ounce of 15 per cent. silver-iodide emulsion, and showed both shadows lying well outside the line of the ureter, which described an S-shaped curve opposite the body of the fifth lumbar vertebra. The ureter was greatly dilated above this point. The pelvis and kidney were in a state of advanced dilatation and atrophy (Fig. 3).

The shadows were then considered to be due to calcified glands, and the pre-operative diagnosis was made of pyonephrosis due to distortion of the ureter by the cicatrization of old mesenteric tuberculosis.

Pus cells and bacilli coli communis were found in the catheter urine from the right side, that from the left being sterile and clear, and subsequent cystoscopic examination showed an occasional ejection of rope-like strands of pus from the affected side. The indications for nephrectomy were considered to be absolute. Through a Mayo lumbar incision the peritoneum was opened external to the ascending colon, prior to the nephrectomy, to explore the site of the ureteral obstruction. Recent omental adhesions were found in the neighbourhood of the pelvic brim; on this account the patient was placed in the Trendelenburg position after the nephrectomy, and a median

sub-umbilical incision was made. A very much thickened and engorged appendix was found. The appendix was densely adherent to the ureter, just above the pelvic brim; free oozing followed the separation. The free edge of the omentum was adherent to the appendix, and to the right side of the fundus of the bladder. The omentum in this situation was very oedematous. Two calcified glands of the

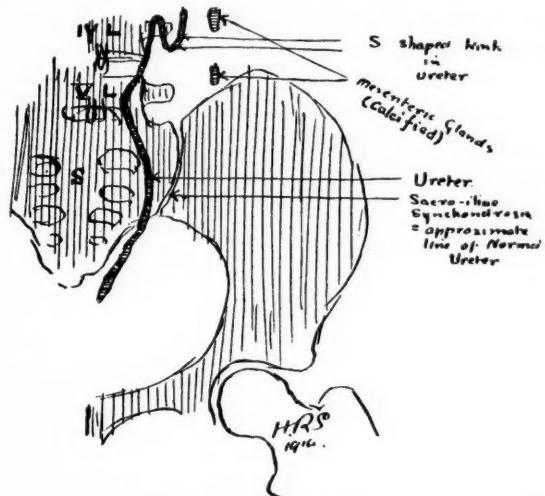


Fig. II.—Second X-ray photograph after injection of silver iodide emulsion (uretero-pyelogram), showing that the shadows are outside the line of the ureter.

size of marbles were found in the mesentery of the lower ileum, together with numerous smaller, shot-sized glands. The mesentery in this situation was glued down to the posterior abdominal wall.

Convalescence was smooth, both wounds being soundly healed on the fourteenth day.

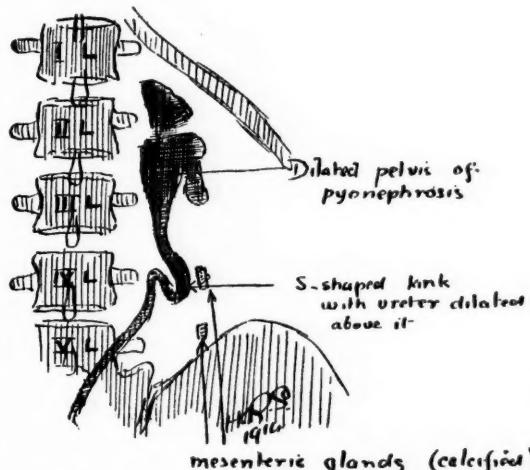


Fig. III.—Pyelogram (silver iodide emulsion), showing pyonephrosis (of 12 drachms capacity) and dilated ureter above kink of ureter.

The appendix on removal was of the thickness of a No. 14 Jaques catheter, and quite solid on section, its appearance suggesting a recent exacerbation of an old tubercular lesion. The specimen was submitted to Professor Welsh, who reported that the naked eye appearance suggested the cessation of tuberculosis, but that there was no microscopic evidence of tuberculosis seen in the section

examined. The local condition at operation, however, was strongly suggestive of recent tubercular peritonitis, and it seems reasonable to label the condition as one of appendiceal tuberculosis. The kidney showed the ordinary appearances of obstructive pyonephrosis, with thinned cortex, flattened calices, and a much dilated pelvis and ureter. There was no evidence of renal tuberculosis.

#### Epicrisis.

This case illustrates one of the common urologic pitfalls which await the unwary. It forms an outstanding example of the value of pyelography, which afforded an absolute indication for a flank attack on the kidney with peritoneal reconnaissance, as opposed to direct frontal attack on the ureter. Without the aid of pyelography, a pre-operative diagnosis of ureteral lithiasis would have been unquestioned; the correspondence between the X-ray shadows and the ureteral obstruction, together with the pain and urinalysis, all pointing to this conclusion. A more or less lengthy and fruitless search would then have been made for ureteral calculi, which did not exist. How the operation would have terminated forms an interesting subject for speculation.

## Reviews.

### CADET TRAINING.

"The Junior Cadet Manual" (1), contains in concise and compact form the whole of the instruction required for the training of junior cadets. It embodies all the prescribed portions of the authorized text-books, and a great deal of additional matter, which is thoroughly accurate and in strict accordance with the official regulations. It thus obviates the necessity of referring to numerous text-books, which is a very great convenience. The "Manual" is designed for the use of the school-teachers of Australia, with whom rests in a large part the responsibility of training the junior cadets, that is of all the male inhabitants of Australia who have resided therein for six months and are British subjects, and are from twelve to fourteen years of age. The training begins on the 1st day of July in the year in which the persons liable reach the age of twelve years, and continues for two years, after which they become senior cadets. The part dealing with physical exercises, from the official "Syllabus of Physical Exercises," contains supplementary exercises, some of which are suitable for girls. Skipping exercises, class-room exercises, exercises for infants are detailed, also dancing steps—the pages upon which are very good. Other parts include "squad drill," "first aid," miniature rifle shooting, organized games, all from the official text-books. Swimming, diving, life-saving and resuscitation are also dealt with. This manual should be in the hands of every school-teacher throughout the Commonwealth. The training contained in it, if carried out, should produce wonderful results in the physique of young Australians, and prove of great value as a prelude to the senior cadet training, and subsequently to the citizen force training of the Commonwealth Defence Act, of which Act the junior cadet training is an integral part.

### GAS POISONING.

The literature on carbon monoxide poisoning is a very large one, but no so large that an addition to it might not be extremely useful, if this addition presented the matter in a form in which it has not yet been presented, or if new facts were brought to light. In their highly interesting volume on mining gas poisoning (2), Drs. Glaister and Logan have to some extent succeeded in offering to the toxicologist a different presentation of the subject than that usually employed. The book contains a very large amount of material, and especially an exceptionally large collection of clinical observations of various forms, which

(1) "The Junior Cadet Manual," including the authorized physical exercises, organized games, miniature rifle shooting, first-aid, squad drill, swimming, life-saving, etc. Compiled and edited by Lieut. R. Sturt, 1914. Sydney: Angus & Robertson, 8vo., pp. 380. Illustrated. Price 3s. 6d.

(2) "Gas Poisoning in Mining and other Industries." By John Glaister, M.D., D.P.H., F.R.S.E., and David Dale Logan, M.D., D.P.H., 1914. Edinburgh, E. and S. Livingstone; 8 vo., pp. 471, with Illustrations. Price, 10s. 6d.

render the reading easier, and bring the clinical appearances of the signs and symptoms of poisoning more directly to the mind than a mere dry recital of what has been met with usually does. The work has been compiled with care, even if the authors have not taken into consideration all the views enunciated by competent Continental observers. The arrangement is fairly good, but the method selected entails more repetition than is absolutely necessary. Taken as a whole, it is the best exposition of the work of Haldane, Leonard Hill, and Mott, that we have read. As the title suggests, the work deals almost exclusively with the effects of the respiration of carbon dioxide and carbon monoxide. Other gases scarcely come into account, and the authors have not treated the subject of gases in other industries exhaustively. The effects of explosions and of falls in mines have received some attention, as would have been expected. In regard to  $\text{CO}_2$  and choke damp inhalation, the account is excellent in every particular, and may be regarded as a full treatise of our knowledge. CO poisoning is not so easy to discuss, and the authors have met the difficulties by illuminating every aspect as impartially as possible. Some of the accounts of clinical manifestations of CO poisoning appear to us to rest on somewhat shallow evidence, but the case is set out in a manner that the expert is not likely to be misled, and the student will not be harmed if he is required to look out for more symptoms than he will meet with. In regard to the pathology, they fall to a serious mistake, which should not have occurred in a work of such general excellence. They very rightly discuss in considerable detail the well-known case of Mott's, of a woman who died four days after inhaling illuminating gas. But there is reason why poisoning by plant gas from the Mond Nickel Company's works should be taken as an instance of carbon monoxide poisoning, even if this plant gas contained a considerable quantity of CO in addition to the nickel carbonyl vapour. It has been shown that the deadly effects of nickel carbonyl is not due to its CO content, but is actually due to the metal deposited in a state of very fine division on the enormous surface of the respiratory organs. It is, therefore, inadmissible to regard the changes found in the brains of the men who died at Clydach, after plant gas inhalation, as evidence of pure carbon monoxide poisoning, since the gas was a mixture of carbon monoxide and nickel carbonyl. It is possible that the deaths may have been due to carbon monoxide, but in any case the poisoning was complicated by the presence of small quantities of another gaseous poison. It is particularly unfortunate that the changes in the central nervous system and other organs produced by pure carbon monoxide and by simple mixtures of this gas with indifferent gases, should not have been studied in a large number of cases, inasmuch as various theories of the pathology of CO poisoning have been formulated, and proof can only be obtained by the determination of the constant histological changes present after acute or delayed death. The authors place at the disposal of their readers nearly all that is known on this subject. We can heartily recommend this book to the notice of those interested in these forms of poisoning, while much useful information in regard to the composition and detection of mine gases will be found in its pages.

We are informed that the Radium Hill Company, of Sydney, is now in a position to supply the medical profession and the medical institutions of Australia with radium bromide of a high order of purity. The product dealt with does not contain any mesothorium, and its activity, we are informed, is wholly due to radium salts and their products. This has been established by Dr. Alexander Russell, F.R.S., under the direction of Sir E. Rutherford, to whom samples were submitted. It is stated that the company has produced material containing 97 per cent. of  $\text{RaBr}_2 \cdot 2\text{H}_2\text{O}$ , but recommend the purchase of material containing between 85 per cent. and 95 per cent. The standardization is undertaken by the company's chemist, Mr. Radcliff, but, at the request of any purchaser, the material will be sent to the National Physical Laboratory in Teddington, where the British radium standard is kept. The results of the measurements made by Mr. Radcliff, however, correspond very closely to those made at the Charlottenburg Institute and at Teddington.

# Medical Journal of Australia.

SATURDAY, NOVEMBER 21, 1914.

## The Public Health of Victoria.

The Premier of Victoria disclosed the programme which the Government has in view in regard to health matters in a speech delivered at Creswick on November 7, 1914. The policy was sketched in outline only, but the Minister for Public Health has since supplemented this account, and has explained the details of the scheme which will be presented to the legislative bodies during the ensuing session. The proposals may be considered in two chapters: the one destructive and the other constructive. The present Board of Health in Victoria is to be abolished. It is regarded as wholly unsuited to the needs of modern hygienic science, and unsatisfactory as an administrative body. To effect this, the Public Health Act of 1890 will have to be repealed. With the abolition of the Board, all the machinery is to be scrapped, save that immediately concerning the Minister for Public Health. The destructive portion is therefore radical, complete and drastic. Provided that the substituted machinery and administrative control is acceptable, no valid objection can be raised against this part of the scheme.

The constructive part is more complicated, and will require more careful and detailed criticism. It is proposed to subject the health control of the State to the Minister for Public Health, who, being a politician and not a hygienist, will require a consultative body of experts to advise him. The administration is to be vested in the Minister and the permanent head of the department, who is to act as registrar to the Central Council of Health. The Minister is to accept full responsibility for the administrative measures, and all appeals against the actions of the Council are to be lodged before the Minister. The Central Council of Health is to be advisory, and while its powers are to be sufficiently wide to attract men of the highest professional standing the work is to be rendered little arduous, in order that no great demand is made on the time of the members. The Council is to represent every branch of sanitary science. Its duties

are to include the drawing up of by-laws appertaining to matters of public health, to investigate various problems at either its own, the Minister's, or outside initiative, and to advise on any desirable reforms of legislation or administration. The officers of the Department of Public Health are to be at the disposal of the Council for the purposes of making enquiries or formulating proposals.

The Central Council of Health is to consist of honorary members, and the following are suggested as suitable for the posts: The Minister for Public Health, the Dean of the Faculty of Medicine of the University, the President of the Veterinary Board of Victoria, the Dean of the Faculty of Engineering of the University, the President of the Royal Victoria Institute of Architects, the President of the Medical Society of Victoria, the President of the Medical Board, the President of the Pharmaceutical Society, a leading statistician, a leading medical practitioner in Melbourne and two leading medical practitioners in the country districts. The head of the Department is not to be a member of the Council.

In addition to this Council, there are to be six District Health Boards. The six districts would correspond to the existing bailiwicks, namely, Central, Midland, Northern, Southern, Eastern and Western. Each board is to consist of five members, all of whom are to be medical practitioners. These members are to be elected locally by the ratepayers, and a Health Officer is to be chairman of the Board. The members are not to receive any honorarium for their services. The Health Board will have power to compel the municipal councils to perform those things which are considered to be necessary for the protection of the public health. The Health Officers will have, in addition to their duties on the District Boards of Health, the task of carrying out the medical inspection of school children, of examining miners working underground, and of acting as factory inspectors.

Although we hold the view that the most ideal administration of matters affecting the health of the community would be one vested in a Federal Minister for Health, who should be a medical practitioner with special knowledge of hygiene, we do not propose to discuss the Victorian scheme from

this aspect. In order to form a fair estimate of the value of a comprehensive health reform, it is necessary at the outset to bear in mind that defects in the past have been due to a lack of action on the part of those whose duty it has been to carry out hygienic measures. Hygiene has become a more or less exact science, and while in certain instances the limitation of a satisfactory result has been traced to the failure of the Medical Officer of Health to take a sufficiently wide view of the matters placed under his control, the system in force in Great Britain has demonstrated that the health of the community is safe when entrusted to the care of an expert who has legislative powers of a wide nature. The danger of a one-man control lies in the possibility that faddism may induce the man to ignore the results of experience. On the other hand, a highly complicated machinery, with numerous persons suggesting and advising, must tend to dilatory action and want of directness. On general lines, therefore, the proposals of Mr. Drysdale Brown would appear to be clumsy and too complicated to promise marked efficiency.

Australia is at present carrying out the experiment of placing the control of the health of the community in the hands of a politician with parliamentary experience and departmental training. In some cases the expedient may prove an unqualified success, and indeed has done so, but on principle the plan is bad, inasmuch as it is a rare attribute, not frequently met with, to be able to select advisers in whom full reliance can be placed, unless the person selecting possesses technical training. The proposed Central Council of Health is to be advisory only in regard to the means adopted to protect and improve the health of the people. In all administrative matters the Minister is to be absolute, and may, if he chooses, ignore the advice of his right-hand man, who is a medical practitioner. The plan may prove good or bad, according to the methods adopted in the selection of the head of the Department, and according to freedom of action given to this official in the execution of his duties. A strong man, working with an open-minded and well-informed Minister, could make the scheme a great success, while the reverse must spell failure. In regard to the advisory council, the proposals will not secure the support

of hygienists and those who have the welfare of the public at heart, unless considerable modifications are granted. If the Government recognizes that the commercial prosperity of the State depends largely on the health of the community, there is no excuse for it to ask the medical and other professions to give valuable time and advice without remuneration. It is a business proposition, and good work can only be commanded if it is adequately paid for. In the next place, the duties of a useful council will be onerous, and it is direct stupidity to set up an advisory body of experts unless it is intended to use it. The Council should be a small, well-paid body, and men, not positions, should be selected. The Dean of a Medical Faculty or the President of a Veterinary Board may be of unexceptional excellence in their respective offices, but may be quite useless as experts in hygiene. No greater mistake could be made in this connexion than that of constituting the council in the proposed manner.

In the last place, there is the unwieldy local machinery. A Health Officer, acting in all sorts of capacities in addition, is to receive the assistance of five of his colleagues, who are to give their services gratuitously, and these men are to fight the municipal councils, who, in the past, have resisted the introduction of hygienic reforms in the majority of cases. Why set up a district health board at all? If the Health Officer is efficient he will not need the assistance of any board, and will probably rarely use it. If he be inefficient, no committee of five would save the situation. The main difficulty, naturally, lies in the municipal council, but this body is unfortunately essential under the present conditions. This body has to carry out the behests of the health officer or council, and has to find the money. For this reason, no scheme can work efficiently or well that does not provide cast-iron machinery for compelling municipal councils to perform their duties properly. It must depend to some extent on the provisions of the Bill in this regard whether the proposals of the Government are likely to effect that kind of reform at which it is aiming. The proposals, as expounded by Mr. Brown, appear to admit of modification before they can assume an acceptable shape.

## EPIDEMIC ANTERIOR POLIO-MYELITIS.

Brisbane has recently been seared by the occurrence of a number of cases of acute anterior-polio-myelitis and by the issuing of a pamphlet "for the information of parents and others interested in the disease." As was to be expected, alarm was caused by these announcements, for it must be remembered that the general public is only too prone to form ideas in regard to the methods of spread of infective and even non-infective diseases. The pamphlet contained the following statements: (1) Infantile paralysis comes under the category of infectious diseases which require to be notified under the provisions of the Health Acts. (2) All cases should be handled according to the rules governing infectious diseases, i.e., isolation, disinfection, etc. (3) The patient should be subject to isolation for at least 21 days from the beginning of the illness. (4) Children in a family where there is a case of infantile paralysis must not attend school until isolation measures have been removed and the premises properly disinfected. (5) All discharges from the throat and nose should be immediately disinfected or preferably burnt. (6) The room, bed, and all excreta from the patient should be carefully screened from flies! flies probably help to carry the contagion. (7) All doubtful cases should be temporarily isolated until such time as the medical attendant determines whether the case is of the epidemic type.

It appears that up to the end of the first week in this month, 32 cases of anterior polio-myelitis had been notified. Dr. Thomson, the Deputy-Commissioner of Public Health, reports that in no instance was more than one case found in one house. It is not clear what is expected by the Department of the public, and why this "information" has been published. It reminds us of an occurrence during one of the early epidemics of influenza, when the London County Council hung great placards on the hoardings throughout the city and boroughs, with a drawing of a microscopie field containing Pfeiffer's bacilli. The picture was labelled the "Influenza Germ," and we presume that the intention of the L.C.C. was that if any person met with anything similar to the depicted object, he was to secure it as best he might and take it to the nearest police station, where he would be suitably rewarded. More-

over, the information is misleading. Anterior polio-myelitis is not infectious in the true sense of the word. We are beginning to learn something about the virus and its mode of entry. Its infective nature is not to be confused with infectiousness. The carrying out of the instructions contained in the pamphlet would prove useless if left to the parents and others interested, unless directed by the medical practitioner co-operating with the health officer. The last sentence of the instructions includes a curious anomaly. The medical practitioner is to decide whether any given case is of the epidemic type, but save that this disease is infective and can be transmitted from child to child or from animal to animal, but little is known of the epidemic spread. A short time ago, some cases were traced to goats and other domestic animals, and it was ascertained that the children who contracted the disease had been in intimate association with the animals showing paralytic symptoms. The bodies of the goats were found to contain material capable of giving rise to paralytic symptoms in monkeys. But this does not mean that epidemic cases can be distinguished from sporadic cases either clinically or epidemiologically, nor that there is a definite epidemic type. The Brisbane people should be reassured that this disease rarely spreads rapidly or attacks large numbers of children. If the parents would consult their medical practitioner early in all cases of illness of their children, the profession would obtain very valuable assistance in the endeavour to combat these infections. In the meantime, the health officers should investigate every case of infantile paralysis for paralytic symptoms in domestic animals and by a careful study of the epidemiology of this affection, much useful knowledge might be gained. But it is no good frightening people unnecessarily.

## THE FACTOR OF SAFETY IN PYELOGRAPHY.

During the past few years a number of striking advances have been made in urological diagnosis. Apart from the various ingenious functional tests, much assistance is accorded to the urologist by a careful and intelligent use of Roentgen rays. The most important advance is undoubtedly the introduction of pyelography. This method appears to be the means of distinguishing conditions which cannot be accurately gauged by any other method or means, as has been clearly demonstrated by Dr. Harry Harris in an able article on this subject

published in the "Medical Journal of Australia," July 11, 1914, and in another contribution which appears in the present issue. Pyelography is extensively used in Europe and America, and may be regarded as a standard method of modern urology. It is unfortunate that from time to time accidents have followed its application. In the October issue of "Surgery, Gynaecology and Obstetrics," three cases are recorded in which untoward results followed the injection of collargol for the purpose of rendering the ureter and renal pelvis visible with the aid of X-rays. In these cases the injected medium found its way into the renal parenchyma, and there set up inflammatory processes. The effect was demonstrated after the kidney had been removed. The patients were under the care of American cystoscopists of high repute, and the records in regard to technique and histological appearances are accurate and full. No attempt was made to measure the pelvic capacity prior to the injection. We are told that 12, "about" 15 and "about" 20 c.m. were injected in the three cases. A normal pelvis frequently has capacity of less than 8 c.m., and it therefore follows that the injection of from 12 to 20 c.m. will result in a considerable increase of intrapelvic pressure, even when the injection is carried out slowly and with caution. It would, therefore, appear that pyelography is unjustifiably dangerous if uncontrolled by a preliminary estimation of the pelvic capacity. This estimation can be carried out with absolute safety to the patient, and the measurements recorded by experienced urologists have proved to be reliable and accurate.

A further source of danger in connexion with pyelography is the employment of colloidal silver. In the cases recorded by the American surgeons, collargol, argyral, and argentos were employed. These preparations contained metallic silver in colloidal solution. The literature of the pharmacology of the colloidal metals has attained a considerable size, but unanimity has not yet been arrived at in regard to the manner in which the metal enters into combination in the organism. There appears, however, to be but little doubt that colloidal solutions of silver may give rise to local or general toxic effects. These considerations have led to the employment of insoluble salts of silver, such as the iodide. It has been found that suspensions or emulsions of these salts do not penetrate into the urinary tubules. The insolubility of the iodide, and the nature of the emulsions render the absorption of the metal a practical impossibility.

If these precautions be taken—the measurement of the pelvic capacity and the employment of an injection material containing an insoluble silver salt—pyelography should be devoid of risk, and should not give rise to pain or discomfort, nor be followed by an undesirable consequence.

#### A DOWNRIGHT IMPOSTOR.

For the first time in a great number of years a prosecution of an unqualified practitioner for un-

lawfully pretending to be a doctor of medicine was taken in Melbourne on November 4, 1914. It is comparatively rare that persons of this stamp place themselves within reach of the law. The prosecution in the case referred to was undertaken by the police. It appears that Martin Roffe offered to treat the four-year-old son of a hairdresser named Pfeiffer for an illness which had been diagnosed as anterior poliomyelitis. He made out that he was a qualified medical man, a member of the British Medical Association, and that he had been registered by the Victorian Medical Board. The offer was accepted, and Roffe stated that the child was not suffering from infantile paralysis. He attended the child for a fortnight, and handed the parents prescriptions from time to time. A chemist pointed out that a pill that had been ordered was suitable only for a child of 14 years. As the child did not get better, Roffe was told not to call again. He sent in an account for five guineas, which Pfeiffer refused to pay. On the demand for payment, Roffe signed himself F.R.S.O., F.R.C.P., B.S., B.M.A. One guinea was eventually paid. In support of the case, Mr. C. Stanton Crouch, the Secretary of the Victoria Branch of the British Medical Association, gave evidence to the effect that these letters were in part recognized medical degrees and in part were not. Another witness stated that Roffe had described himself as being a medical practitioner attached to the Women's Hospital. The Chairman of the Court held that Roffe was a downright impostor, and fined him the full penalty of £50, with £4/18/- costs. It is especially gratifying to note that the police and the magistrates in Melbourne have recognized the necessity of protecting the public against swindlers of this kind. The police can seldom be induced to prosecute in medical cases, more especially when the charge takes the form of pretending to be a registered or qualified medical practitioner. The greatest amount of publicity should be given to the details of this case.

#### DIPHTHERIA IN TOOWONG.

Since July 1, 1914, 17 cases of diphtheria have been notified in the Toowong district. Three of these occurred in July, 4 in September, and 10 in October. In 7 cases the patients affected were children attending the Toowong State School. Steps were taken to limit the spread of the infection in the school, and two nurses were entrusted with the taking of swabs for bacteriological examination; 113 children were examined in this way, and the report of the bacteriological investigation showed the presence of Klebs-Loeffler bacilli in 6 cases. We are doubtful of the value of the bacteriological examinations when the faecal mucus is collected by a person not trained in a bacteriological laboratory. Since no cases of clinical diphtheria were present, the six children showing diphtheria bacilli in their throats were regarded as "carriers," and were excluded from the school, together with the "family contacts."

## Hospitals.

### KALYRA SANATORIUM, BELAIR, SOUTH AUSTRALIA.

The Annual Report of the James Brown Memorial Trust for the year 1913-14 has just been issued. The Trust was founded by the late Mrs. Jessie Brown, who died in 1892, and was incorporated by Act of Parliament in 1894. The Trust has control of a consumption sanatorium at Belair and a home for the aged blind and for crippled children near Semaphore.

Dr. J. Walter Browne deals with the work undertaken at the Kalyra Sanatorium. 109 patients were treated during the year. The disease was arrested in 27 cases, improvement was attained in 77 cases, in 40 patients the condition was unaltered. Six patients were discharged at their own request, and on July 1, 1914, 40 were still under treatment. Of the arrested cases 22 were in stage 1, 4 were in stage 2, and 1 was in stage 3. Of the improved cases 14 were in stage 1, 47 in stage 2, and 16 in stage 3. 113 patients out of the total of 190 increased in weight; the greatest increase was 26 pounds, while the average was 8.9 pounds. Tuberculin is not used at present at the Sanatorium in the treatment of pulmonary tuberculosis. The average number of cases arrested during the five years preceding the introduction of tuberculin injections was 67.1 per cent., and during the five years following it was 69.1 per cent. Dr. Browne is of opinion that it is doubtful whether it effects any beneficial action on the disease, whereas he is convinced that at times it does considerable harm. The treatment employed at the present time consists in rest, graduated exercise in the open-air, careful dieting, and a strict regime. In a few cases artificial pneumo-thorax has been resorted to with apparently good results.

### JUBILEE SANATORIUM, DALBY, QUEENSLAND.

In the annual report of the Jubilee-Sanatorium at Dalby for the year ending June 30, 1914, the Medical Officer, Dr. A. Stewart, states that 155 patients have been treated in the Sanatorium during the year, of which number 110 were fresh cases; 6 patients died and 100 were discharged. Among the latter were 8 patients who were suffering from non-tubercular affections; 30 of the discharged patients were in the first stage; in 14 the disease was arrested; in 10 improvement was attained, and in 6 the condition was unaltered; 48 patients were in the second stage; in 2 the disease was arrested; in 23 improvement was attained; and in 23 the condition was unaltered; 21 patients were in the third stage; in no case was the disease arrested; in 6 improvement was attained; and in 15 the condition was unaltered; 5 of the 6 patients who died were tubercular, 2 were in the second stage; and 3 in the third. The sixth death affected a patient with miner's phthisis. In 9 cases the pulmonary tuberculosis was complicated with miner's phthisis, tuberculous disease of the shoulder, meningitis, gastric-ulcer, Bright's disease, diabetes, melancholia, and pregnancy. In all 16 cases were arrested after an average staying in the Sanatorium of 220 days; the average increase in weight was 16 $\frac{1}{4}$  pounds. The average stay of the 39 patients who were discharged improved was 198 days, and the average gain in weight was 14 $\frac{1}{4}$  pounds. Dr. Stewart is treating a certain number of patients with tuberculin, and comparing the results with those obtained in an equal number of patients treated without tuberculin. The non-tuberculin series included 21 patients who were discharged during the year; five of these are ignored on account of the fact that they left the Sanatorium before the treatment was completed. Of the remaining 16, 6 (stage 1) were discharged as "arrested," and 10 (1 in stage 1, 8 in stage 2, and 1 in stage 3) were discharged as "improved." The series of tuberculin cases included 12 patients who were discharged during the year. In five the treatment had not been completed. Of the remaining 7, 3 (stage 1) were discharged as "arrested," and 4 (2 in stage 1, 1 in stage 2, and 1 in stage 3) were discharged as "improved." The tuberculin used was Denys's bouillon filtrate, followed by bacillary emulsion. In regard to dosage Dr. Stewart unfortunately enters his records in cubic centimetres, instead of in milligrammes of bacteria.

The average dose of Denys's tuberculin was 1 c.cm., and of B.E. 0.28 c.cm. We wish to point out that 1 c.cm. of stock solution of bacillary emulsion contains 5 milligrammes of bacilli. A not infrequent initial dose of B.E. is 0.005 milligrammes. We trust that when Dr. Stewart publishes a full record of his interesting experiment, after five years, he will give the fullest information in regard to the actual dosage of tuberculin used and not the bulk of fluid injected, the rate of increase and the method of control.

## University Intelligence.

### MELBOURNE UNIVERSITY.

The Council of the Melbourne University considered, on November 9, 1914, the proposal submitted to it by Professor Berry for the re-building of the Medical School in or near the Melbourne Hospital (see "Medical Journal of Australia," October 24, 1914, p. 403, and October 31, 1914, pp. 434-435). In explaining his proposal, he adduced the following arguments in its support: (1) Medical schools and hospitals were placed in working contact in Germany, in parts of other Continental countries, in Edinburgh and Aberdeen, and also in some cities in America. (2) The proposal is said to have received the unanimous support of the members of the Melbourne, St. Vincent's and Alfred Hospitals, of the members of the medical staff of the University of Melbourne, of the Faculty of Medicine, of every man who has so far been approached in Victoria, of the "Medical Journal of Australia," of one of the morning papers in Melbourne, and of some members of Parliament. It is necessary to point out in this place that Professor Berry has been carried away by his enthusiasm for his highly interesting scheme. The approval of the clinical staff of St. Vincent's Hospital was given only to the idea in its concrete form, and actual opposition was raised against the suggestion that the medical school should be erected in the grounds of the Melbourne Hospital. The approval of the staff of the Alfred Hospital was, we are informed, limited to the idea underlying the scheme. In regard to the "Medical Journal of Australia," we deliberately refrained from expressing approval of all the details of the scheme, and contented ourselves with the statement that the fundamental part appeared to us to be sound, and that, with the exception of what seemed to be a serious defect, the ideas were excellent. (3) The principle had been acted on in Adelaide and Sydney. (4) The benefits to the suffering sick would outweigh every possible objection. (5) The University would gain by obtaining increased accommodation and in other ways. (6) The expense would not involve a larger sum than had been spent during the last 10 years in Sydney. (7) There was no disturbance of the order or precedence of the Council's building proposals. (8) The scheme did not involve separate financial or administrative procedures for the medical school apart from those of the University. Professor Berry anticipated the arguments which could be used against his proposal, and met these arguments seriatim before winding up his speech with a general plea for the acceptance of his scheme.

Dr. Leeper was of opinion that, while the unanimity of the Medical Faculty was extremely important, other aspects should be considered. He thought that it was beneficial for medical students to come into daily contact with students of the other faculties. He suggested that the carrying out of the scheme might interfere with sport. Dr. Barrett expressed himself in favour of the idea. Professor Masson voiced the opinion of the Dean of the Faculty of Science on the matter. He objected to the proposal to put that faculty into the cast-off buildings. Mr. Fink thought the Council should satisfy itself before taking definite steps that the removal of the school would not be a mistake. Dr. Bride opposed, and Dr. Syme spoke in favour of, the scheme. The latter was a little doubtful as to its feasibility. Professor Allen supported Professor Berry's suggestions in a very warm manner, and Mr. Mackey stated that the whole question resolved itself into one of financial practicability. On the motion of Mr. Fink, the discussion was adjourned until Monday, November 23, 1914, when representatives of the British Medical Association and of the Melbourne, St. Vincent's and Alfred Hospitals could express their opinion.

## Abstracts from Current Medical Literature.

### SURGERY.

#### (203) Small Deep Skin Grafts.

J. S. Davis ("Journ. Amer. Med. Associat.", 12th Sept., 1914) gives an account of the preparation and uses of small deep skin grafts. He points out that the old Reverdin's grafts were but little more than epidermis. They were first employed before antisepsis was introduced, and were then probably the only forms which could have yielded satisfactory results. The small deep grafts are prepared in a similar manner to Reverdin's grafts. The surface requiring grafting must be composed of healthy granulations, free from pus, rose-pink in colour and not exuberant. All bleeding must have ceased, and the surface must be absolutely dry. On the day preceding the operation, all secretions and crusts are removed. The surface is painted with iodine and dressed with balsam of Peru and castor oil or moist boric or salt gauze. It is wiser to take autografts, as they heal much more uniformly than do grafts taken from other persons. A very large number can be taken from a comparatively small area of skin. Any area suffices, but where the skin is taut they are easier to cut. For this reason the abdomen is not a good place. The skin is cleaned by shaving and washing with soft soap and water. Rinsing with sterile water, sponging with ether and alcohol, and finally rinsing with normal saline solution finishes the preparation. No antiseptic is required. Local infiltration anaesthesia may be employed, and does not interfere with the healing of the grafts. The graft is cut in the following manner. A straight intestinal needle is held in an artery clamp, and with it the epidermis is raised. The cone is then cut through at its base with a knife. Davis states that the use of forceps and scissors is likely to damage the graft too much. The graft is then removed on the point of the needle and transferred to the surface of the wound. After two rows of small grafts are in place, a strip of sterile rubber protective is applied. This strip should be about 1.5 cm. wide, and should just cover the first row. The space between the individual grafts should not exceed 5 mm. As each row is applied fresh strips of protective are applied. The grafts uncurl themselves and spread out quite evenly on being pressed down. After all are in place the edges of the protective are fastened to the normal skin by means of a few drops of chloroform. Boric ointment is applied to the area from which the grafts are taken. Each graft measures between 2 and 4 mm. in diameter. On the second or third day the protective is removed with caution, and a bland ointment substituted. If the epithelial growth is not vigorous, an 8 per cent. scarlet red ointment in petroleum or zinc ointment may be applied. The author warns the surgeon against prickling the granulating wound with the

needle on applying the graft. At times keloid develops in the grafted area; this is, however, not the fault of the graft, but would in all probability have developed had no grafting been undertaken. Small deep grafts should not be employed for the face as a rule. If it is used, the grafts should be applied in continuity. Otherwise, contraction between the grafts is very marked.

#### (204) Radium in Surgery.

Robert Abbe ("Med. Record," Aug. 15, 1914) gives his estimate, after ten years' experience, of the value of radium in surgery. He states that it is not yet known how best to use radium, and its action is imperfectly understood, but observed facts can be recorded. In new growths it cures the disease by a selective action against the component cells of the tumor, discriminating in favour of cells of healthy growth. In myeloid sarcoma radium not only checks and destroys the growth, but permits reformation of the bone with its original structure and form, and this effect is not transient but lasting. It has cured round-celled sarcomata and papillomata, notably extensive papilloma of the larynx, and it is a specific in all basal-celled epitheliomata. It has caused the disappearance of myomata and uterine fibroids. On the other hand, it has failed to check the growth of spindle-cell sarcomata and squamous-celled epitheliomata. In the latter, as opposed to the basal-celled type, invasion of lymphatic glands is early, and early extensive surgical dissection is indicated. Cancer, if radiated in its very early stages, can be cured by radium, as proved in several cases of cancer of the breast and cervix uteri. A large experience of radium applied in advanced and inoperable cases leads the author to conclude that retardation of the growth occurs in one-tenth of the cases, while its post operative use is of the greatest importance in preventing fresh growth. By producing an irritative endarteritis, it cures naevi and keloids better than any other known agent, and it is of great use in causing retrograde metamorphosis in hypertrophic glandular structures, such as goitres, lymph adenomata and lymphosarcomata.

#### (205) Operations on the Biliary Tract.

In the "Canada Lancet," August, 1914, J. M. T. Finney discusses the unsatisfactory results of operations on the biliary tract, which occur in a variable percentage of the cases of every surgeon. It is becoming gradually recognized that, for the majority of the affections of the biliary tract, the only really curative treatment is surgical, but the differential diagnosis of the exact conditions present is frequently difficult, and the choice of operative procedure suited to each individual case requires experience and judgement. The operation mortality of cholecystectomy is higher than that of cholecystostomy, but the two are almost equal if to the latter is added the mortality rate of the secondary operations, which are more frequent after cholecystos-

tomy. The gall bladder may have other functions than the mere storage of bile, and cholecystectomy is still on its trial. The great objection to it will always be, that in cases of subsequent obstruction of the common duct the other avenue of the passage of bile by cholecyst-enterostomy, has been cut off. In such cases, also, operations on the common duct are difficult, have a high mortality rate, due in Crile's opinion to the injury of the sympathetic nerve supply to the liver. The author, however, attributes it to the artificial draining away of the bile, which, if prolonged, leads to a typical picture of marked mental and physical depression. The chief cause of secondary operations are fistulae, adhesions, recurrence of calculi and hernia. All observers agree that stones do reform, but rarely. In most cases they have been overlooked, in spite of every care at the previous operation. The author knows of no way of thoroughly exploring and emptying the biliary passages of calculi. In some cases operation fails to reveal an adequate cause for the patient's symptoms. The author has frequently found in neurotic patients a peculiar dilatation of the duodenum, with atony of the stomach, giving rise to a symptom complex which involved also the liver and biliary tracts. Such a condition would account for the recurrence of symptoms. He protests with Mayo against the loose classification of many pathological conditions under the head of cholecystitis and chronic pancreatitis, conditions in the study of which much more careful and scientific work is needed. Acute dilatation of the stomach, nausea and vomiting following operation are best treated with the stomach pump. Troublesome oozing is occasionally met with in cases of deep jaundice due to cancer. In one case fresh rabbit serum checked the haemorrhage. The coagulation time of the blood is not always a reliable indication of the danger of haemorrhage, but subcutaneous ecchymoses and oozing from the mucous surfaces are highly significant. A diminution of unsatisfactory results after these operations is to be expected, as the result of improved technique, the avoidance of shocks and adhesions, by more accurate diagnosis and by earlier reference to a surgeon by the physician.

#### (206) Surgical Treatment of Graves's Disease.

When exophthalmic goitre was first described but little stress was placed on the occurrence of true exophthalmos. Although this condition was described independently by Parry, Flajani, Basedow and Graves, it was only the latter who paid special attention to this symptom. At a later date some confusion occurred between exophthalmos and Stellwag's staring and Dalrymple's widening of the palpebral fissure. In 1907 Landström suggested that the exophthalmic in hyper-thyroidism was due to the irritation of the sympathetic ganglia controlling the action of certain muscle fibres which occur in

irregular streaks in the fascia behind and around the eyeball. It had previously been shown that irritation of the sympathetic ganglia produced protrusion of the eyeball and dilatation of the iris. Rousseau first suggested that the cervical sympathetic was involved in the Graves's disease. Jaboulay was the first to remove the sympathetic ganglion in this condition. C. H. Mayo (Journ. Amer. Med. Association, Oct. 3, 1914), deals with this subject, and points out that in the cases operated on by him the immediate results were excellent. The time since the operations is too short to warrant a positive statement as to the permanency of the cure. Abadie pointed out that partial extirpation of the thyroid only removed some of the symptoms of Graves's disease, while sympathectomy produced perfect cure. At times Mayo resects the upper and middle ganglia. The incision is made opposite the bifurcation of the carotid, the sternomastoid is drawn outwards, and a blunt dissection is made down to the carotid and jugular. The posterior sheath enclosing these vessels is opened, in order that the vagus may be kept in sight during the operation. It is possible to mistake it for the sympathetic. After removing the ganglia Mayo closes the wound without drainage.

#### (207) Aperiosteal Amputation.

H. H. M. Lyle (Journ. Amer. Med. Association, Oct. 3, 1914) deals with the methods of treating the bone in amputation. The object in view is to create a stump which will bear the weight of the body. The old periosteal method rarely did this, and the proportion of bad stumps was very high. The second method yields almost ideal results, but is extremely difficult to perform well. This method is the osteoplastic, and consists in covering the sawn surface of the bone with a bone flap, the periosteum of which has a normal connexion. A third method is the tendinoplastic, and is only applicable when a large tendon is available for the purpose of covering the end of the bone. The aperiosteal method yields, in the author's opinion, a very useful weight-bearing stump, and is simple to carry out. The incision may be either that of Kocher or the flap incision of Jackson. The scar should be so situated that it will not be subjected to terminal pressure. The periosteum is then removed for 1 cm. above the level of the saw line. The medullary canal is spooned out for the same distance. In suturing the flaps the muscles should be dealt with separately, and antagonists sewn together in order that the muscular balance may be preserved. In the after-treatment the leg should be elevated, and as soon as healing has taken place massage, warm baths, the application of 2 per cent. salicylic acid in olive oil and mechanical measures should be employed. He considers this method as the most universally applicable, and the most practicable.

#### GYNÆCOLOGY AND OBSTETRICS.

##### (208) Inoperable Carcinoma Uteri.

Percy (Surg. Gynæc. and Obstet., October, 1914) advocates the use of heat in the treatment of inoperable cancer of the uterus, and also its use preliminary to surgical interference. After mentioning the various methods at present employed for destroying cancer cells, viz., caustics, chemicals, actual cautery, and freezing, etc., he draws attention to the fact that they destroy normal tissue cells as well as cancer cells. Next he reviews the investigations of Haaland, Loeb, Lambert, Doyen, and Vidal on the effects of varying degrees of heat on cancer cells and normal tissue. These investigations go to prove that there is a definite relationship of damage between the degree of heat and the time of exposure to both normal and malignant cells. Sarcoma cells are destroyed when exposed to 108.5° F. for 24 to 48 hours, 109.5° F. for 6 hours, 111.2° F. for 50 minutes, and 114.8° F. for 20 minutes, while the normal connective tissue cells survive these various exposures. He mentions the various means by which local heat may be applied: hot air, hot water, steam, electro-coagulation, and actual cautery are mentioned, and the objections to their use are set forth. Finally he describes his own method of heat application. He uses a water-cooled speculum and an electric heating iron controlled by means of a rheostat at a temperature just sufficient to be uncomfortable to the hand of the surgeon, encased in a medium weight rubber glove. This low degree of heat is maintained for 10 to 20 minutes, and it is claimed to kill the cancer cells without injury to the normal tissues. He warns against carbonizing the cancer, as is the case when actual cautery is used, for the reason that carbon inhibits the dissemination of heat. He states that the cancer is destroyed when the temperature in the mass is raised to 122° to 131.9° F., while the vitality of the normal tissues is not changed until the temperature exceeds 131° to 140° F. The basic idea of the treatment is not cauterization, but the production and dissemination of heat in the gross primary mass of cancer. In very weak patients he recommends several mild applications in preference to one over a long period. He strongly advises against the use of the curette either before or after the application of his method. He reserves the statistics of his results for a future paper, but asserts that if the absolutely hopeless cases are excluded at least 50 per cent. will remain free from recurrence for over five years.

##### (209) Rupture of Symphysis Pubis.

Jellett (Dublin Jr. of Med. Science, August, 1914), in his clinical report of the Rotunda Hospital, gives the details of a remarkable case of parturition, in which rupture of the symphysis

pubis occurred during the delivery of the child. The patient was a primipar, 32 years of age, who was admitted to the Rotunda Hospital after having been in labour 30 hours. The membrane had been ruptured for 20 hours, and two unsuccessful attempts at forceps extraction made. The uterus was contracted tightly around the child, whose heart beats could not be heard. The os was three-quarters dilated, and the head was not fixed. There was no marked pelvic contraction. After a rest of six hours there was no advance. Forceps were applied, and after some traction the child was delivered. During traction a crack was heard, and on examination the symphysis was found to be separated in front. The upper and lower ligaments had held, but the bones were sufficiently separated to allow a finger to be pushed between. During the separation a vaginal tear occurred on the right side of the clitoris. This was repaired; a pubotomy belt applied. The patient made an uninterrupted recovery, with no subsequent difficulty in walking.

##### (210) Perincorrhaphy.

Jellett (Surg. Gynæc. and Obs., September, 1914) discusses at length his own method of performing perineorrhaphy, which he has practised with success for the last six years. It resembles the older operations of Lawson Tait, Martin, Hegar and Kelly, except that he lays particular stress on the perineum failing to accom-muscle. He considers any operation on the perineum failing to accomplish the end is worse than useless. He disagrees with Krönig, who teaches that it is extremely difficult to expose and draw forwards and inwards the levator ani, and considers that the deep transversus perineus is the chief muscle to suture. Jellett considers that it is difficult to distinguish this latter muscle, but that it is quite easy and not dangerous to expose the anterior part of the levator ani, except in those rare cases in which these muscles are so atrophic, lacerated, and separated, that they are difficult to find and draw forwards. In these cases, he says that it is useless to do any kind of plastic operation for efficient restoration of the perineum. In his operation, after raising and detaching the flap of vaginal mucous membrane he exposes and unites the anterior edges of the levator ani muscles by two buried catgut sutures. He next carefully approximates the cut edge of the vaginal mucous membrane. He uses silkworm gut for skin sutures. He lays great stress on the proper method of packing the vagina with iodoform gauze, so as to exert pressure from above downwards, and thus obliterate the dead spaces which are formed by uniting the levator ani muscles together. He states that there is very little danger of causing a haematoma, or originating emboli by puncturing the recto-vaginal venous plexuses, as alleged by Krönig and others.

## Contract Practice

VI.

### British Medical Association.—(Continued.)

It therefore appears that in Australia each State is a Division and a unit of the Association. In it is vested the management of professional affairs in so far as the area of each Branch is concerned. Each Division has the right of representation in the Representative Meeting in the United Kingdom. It must further be noted that provided they keep within the limits of the Memorandum of Association, the Branches have full autonomy, and are empowered to further the interests of the profession within the various States. In Victoria, the Branch Council has found it convenient and purposeful to entrust some of its duties in regard to the control over members to smaller bodies, which it terms "Divisions." This term is unfortunate, in that it would suggest that the Divisions are Divisions in the sense employed in the Articles and By-laws of the Association. It would be competent to the Branch to divide its area into Divisions. At present, however, Victoria must be regarded, as the other States are regarded, as a Division of the Association which is at the same time a Branch. The method adopted in New South Wales is similar, but the terms employed are different. The local societies in various parts of the State are affiliated to the Branch, and while matters affecting the honour and interests of the profession are discussed at the meetings of the delegates of the societies with the Council of the Branch, they have no locus standi, nor any powers, and resolutions passed by them are merely recommendations to the Council. It is competent to any Branch to form within its area sub-divisions, societies, or committees for the purpose of facilitating the medico-political work. The Councils, however, have no power to delegate their functions, and before any policy can be enunciated and accepted by the Branch as the policy of the members, a resolution must be passed by a meeting of the Branch. Under the peculiar geographical circumstances obtaining in the Commonwealth, a democratic government of the Association in Australia is impracticable. In order to overcome some of the difficulties which have presented themselves in the Commonwealth, and especially to remove the necessity of cumbersome negotiations between the individual Branches in Australia and the Council in London, a committee was formed to co-ordinate the work of the Branches throughout the Commonwealth. This Committee is known as the Federal Committee. It does not enter into the constitution of the Association, but is a body to which specific powers have been delegated by the Council of the Association. It has no power to originate action, nor can it act on the representation of individual members. Matters referred to it by the Branches, in so far as they affect the profession in Australia exclusively, can be dealt with by the Federal Committee, without the sanction of the Council having been first obtained.

The suggestion of the formation of a Federal Committee of the British Medical Association in Australia emanated from Dr. Hayward, President of the South Australian Branch in 1911. A scheme of constitution was drawn up in the early part of 1912, and submitted to the Representative Body at Liverpool. The Representative Body agreed to grant the right of federation of the Australian Branches with autonomy with regard to matters of Australian concern, and subsequently the Organization Committee of the Association approved the regulations governing the constitution of the Federal Committee. These regulations have been published in the "Australasian Medical Gazette," January 25, 1913. Its functions, powers and duties are as follows:—It shall undertake all communications and negotiations with the British Medical Association in the United Kingdom, and with the various governments and other bodies on behalf of the Branches in Australia; it may undertake the co-ordinating work of a medico-political nature, or in connexion with the organization of the profession, and generally carry out any work which is held to be to the advantage of the medical profession or the Association in Aus-

tralia. Its powers are naturally limited by the terms of the Memorandum of Association and by the terms of its reference.

As mentioned before, the Central Council conducts much of its work by means of Standing Committees. The chief committee is the Medico-Political, which consists of six members, elected by the Representative Body, and six members elected by the Council. The Central Ethical Committee consists of the same number of members elected in the same manner, while the Organisation, Public Health and Journal Committees consist of three members appointed by each body. In addition there are Finance, Science, Hospitals, Naval and Military, Scottish, and Irish Committees, and lastly a Colonial Committee, consisting of two members appointed by the Representative Body and two by the Council.

The machinery of the Central office is extremely complicated, owing to the large number of subjects which are dealt with. In order to regulate the activity of the various bodies, and to maintain continuity of action, a Medical Secretary's Department was instituted at the time of the re-organization of the Association. The Medical Secretary has control of the work undertaken by the Medico-Political, Ethical, Organization, Public Health, Hospitals, and Naval and Military Committees and of the Representative Meeting. He acts as Secretary, together with the Financial Secretary and Business Manager, to the Council. The work entailed in connexion with these Committees and a large number of Sub-Committees is necessarily very large, and a considerable strain was placed on the Medical Secretary's Department during the time of the Insurance Act difficulties. The Medical Secretary occupies the position of head of one of the three departments of the Central Organization. His staff consists of an Assistant Medical Secretary, and a second Assistant as well as a large clerical staff. One of the two Medical Secretaries is always prepared to attend meetings in any portion of the United Kingdom, and advise a Division or Branch in regard to the work under consideration.

The Financial Secretary and Business Manager is the head of the second department of the Association. His duties consist in those of Secretary to the Council, Journal, Premises, and a number of other committees; in attending to the property of the Association, in purchasing paper, plant, and type for the Journal, and in arranging all contracts for printing, etc.; in securing suitable advertisements, and generally managing the business part of the Journal; in keeping the general accounts of the Association, including those connected with charitable funds, superannuation, etc.; in preparing and keeping lists of members; in managing the Annual Exhibition of Foods and Drugs, and in making arrangements in connexion with the annual meeting. The conduct of this work requires very considerable skill and assiduous attention, and on its efficient execution depends the financial stability of the Association and the smooth working of many of its departments.

The third department of the Central Organization is that of the Journal, the Editor being the head, and the staff, consisting of a Sub-Editor, an Assistant Editor, confidential clerks, secretaries, and typists, as well as a small army of outside contributors.

It will have been noticed in comparing the terms of the Draft Charter with those of the Memorandum of Association that certain things would have been permitted under the former which are not specified in the latter, and are therefore presumably ultra vires under the existing constitution. The chief of these is the power to undertake benevolent work, utilising the funds of the Association for the purpose, the power to undertake medical agency work, and to sell lists and registers of medical practitioners and records of events; the power to support or originate fresh legislation, and to support the candidature of any member of the Association for Parliament; and the power to take or defend legal proceedings, either in the civil or criminal courts, in which the honour or interests of a member of the medical profession is involved. It appears that the funds of the Association cannot be used for the purpose of compensating members who have suffered loss of practice as the

result of loyalty to the Association. It was, therefore, found to be necessary to organize special funds for this purpose when difficulties in connection with contract practice arose. The members in the United Kingdom are content to leave untouched those other forms of activity which are not permitted by the Memorandum of Association. In Australia the disadvantage of this limitation has been felt in regard to one or two special matters. This difficulty was overcome by the formation of special companies, the membership of which was limited to members of the Association. By this means the various Branches have obtained houses of their own. A company was formed for the purpose of issuing one Medical Journal for the whole of Australia, which Journal is the official organ of the Australian Branches of the Association. The same company has the power to undertake, if it desires to do so, medical agency, medical defence, and other forms of work. With the assistance of companies formed in this manner, the British Medical Association in Australia is in a far stronger position, and has far wider powers than the Mother Association.

## British Medical Association News.

### SCIENTIFIC.

A meeting of the South Australian Branch was held at the Lister Hall, Adelaide, on October 29, 1914, Dr. E. W. Moore, the President in the chair.

Dr. J. A. C. Hamilton read a paper on a case of pseudo-hermaphroditism, in a person, aged 18 years. The patient sought medical treatment on account of painful swelling in each groin. The swelling was first noticed three months before, after running. It caused discomfort on stooping and sitting. The patient had never menstruated. On examination, a rounded, tense swelling was felt in each inguinal canal. The swellings were of the size of walnuts, were tender on pressure, freely movable, could be displaced downward into the vulva, but could not be reduced into the abdomen. The external genitals were natural in appearance; the hymen was present. Behind the hymen was a cul-de-sac about  $\frac{1}{4}$  inch in depth. In the posterior wall there was a small opening, which led into another cul-de-sac of about  $\frac{1}{2}$  inch in depth. The whole vagina was thus about  $\frac{3}{4}$  inch in length. No uterus or appendages could be felt per rectum. The swellings were thought to be ovarian herniae. An incision was made over the tumour on the right side, and the swelling was found to be a small testicle included in its tunica vaginalis. There was a normal epididymis and vas deferens. The same condition was found on the other side. Both testes were removed, and the abdomen was explored for the presence of uterus, ovaries or prostate, with a negative result. The patient was a comely-looking girl and had feminine attributes. The labia majora and minora were well developed, there was no trace of hypopadias; the meatus and urethra showed no malformation, and the mons veneris and distribution of pubic hair were feminine. Dr. Hamilton gave other details of the patient's habits, and also of the various bodily measurements. The latter demonstrated that she was unusually well developed, some of the measurements being closer to the male than to the female type. She was a champion runner. The line from the axilla to the knee was comparatively straight, and the usual curve at the waist, seen in the majority of women, was not present, neither did the hips bulge. The thighs were straight and flat, unlike the majority of female thighs.

The term hermaphrodite was frequently employed somewhat loosely to describe an individual whose organs partake of the nature of both sexes. It was employed by naturalists to signify an animal possessing conjoined ovaries and testes, or an ovary on one side and a testis on the other. The majority of authorities agreed that no example of such a condition in a human individual had been met with. The malformations met with in the human race were generally called pseudo-hermaphroditic. The crucial test of sex, however, was not to be found in the condition of the external organs, but was dependent on the nature of the essential sexual glands. If the glands were testes, the sex would be male, and if they were ovaries, the sex

would be female. A uterus might be associated with a perfectly formed penis and testes; the presence or absence of the uterus did not help us in deciding the sex. In the majority of these unfortunate individuals, the sexual glands were testes. As a rule they were brought up as girls, but Bland Sutton considered that they should be named, trained and educated as boys. In his own case, the conditions were in so far exceptional, in that the patient was feminine in every respect save that the sexual glands were testes. According to the accepted classification, the patient should be classified as a male pseudo-hermaphrodite, but the speaker preferred to refer to the patient as a female. The presence of testes might have accounted for the patient's prowess as an athlete. He attempted to dissuade the patient from marrying, but "she" was engaged to a man, and was unwilling to break the engagement off. Dr. Hamilton explained to her that unpleasantries would sure to arise. Photographs of the organs and the testes removed were demonstrated.

Dr. J. C. Verco differed from Dr. Hamilton in his assertion that true hermaphroditism does not occur in human beings. He was fairly sure that Delafield affirmed its existence, and that sometimes it was lateral, an ovary, a fallopian tube, a uterus and a vagina being on one side, and a testis and spermatic cord on the other (1).

Dr. Wilcox supported Dr. Hamilton in his contention that no authentic case of complete hermaphroditism had been recorded (2).

Dr. Ray considered that the most important aspect of these cases was that of treatment. As the secondary sexual characters of the patient were almost exclusively feminine, and appeared to be permanent, it could not be doubted that the glands in question, though having some male characters microscopically, could not be regarded as essentially male in all functions, and that the internal secretion probably corresponded to that of an ovary. Moreover, the glands only possessing some male characters, it was doubtful whether they would be subject to the same morbid changes to which the ordinary cryptorchid was known to be prone. He thought that it would, therefore, be better, in cases such as Dr. Hamilton's, to transplant the glands into the abdomen, than to render the patient asexual. Under the latter treatment, it was doubtful what direction the secondary sexual characters would take.

In his reply, Dr. Hamilton stated that he was aware that older writers had recorded cases of what they considered to be true hermaphroditism, but as Zweifel had pointed out, the evidence had not been supported by microscopic proof. Other English, American, Italian and German authors had agreed that no genuine case of the co-existence of well-developed testes and ovaries had ever been reported. In reply to Dr. Ray, he admitted that it was a matter open to question whether the testes should have been transplanted in this case, but as the patient presented the characteristics of a female, he preferred to remove the organs. He spoke of the case of Katerina Hohmann, in whom menstruation was supposed to have occurred, despite the fact that the right testis had descended into the labium. The menstrual discharge was discovered to be a trick.

Dr. Dawkins showed a patient who had suffered a compound dislocation of the external maleolus. The lower end of the fibula had torn its way through the ligaments and the skin. It also pierced the sock, and protruded above the side of the patient's boot. The dislocation was reduced after the joint had been opened freely, and the whole joint was irrigated with weak iodine solution. The patient was able to walk in six weeks, and had full movements of the ankle. The speaker was surprised that so violent an in-

(1) Dr. Verco has since supplied the reference containing this statement, and now calls attention to a more recent one. Delafield and Prudden, 1892, *Pathological Anatomy and Histology*, p. 623. The other reference is Bleil: *The Internal Secretory Organs*, 1913, p. 363. "We now know that true hermaphroditism in the morphological sense of the term, is observed in man, and that it occurs in the form which formerly appeared most doubtful, namely, hermaphroditism of the glands (ovotestes)." It may be added that Dr. Magnus Hirschfeld, of Berlin, exhibited wax models of cases of true hermaphroditism, "*wahres Zwilertum; beiderlei Geschlecht*," in the Museum of the International Congress of Medicine, London, 1913. He demonstrated the association of male and female sexual glands (ovotestes) in one individual.

(2) The précis of Dr. Wilcox's remarks has not reached Sydney in time for publication in this issue. It is hoped that it will be published in next week's issue.

jury had not caused a fracture of the bone, and also that the wound should have healed by first intention.

Dr. T. G. Wilson showed the uterus and adnexa removed from a multipara, aged 37 years, who had had a hydatidiform molar pregnancy. She had several haemorrhages, and was curedtted in hospital. The pathological report of the scrapings revealed that the condition was a typical chorio-epithelioma. The uterus was removed eight weeks after the hydatidiform mole was detected. In spite of careful examination, no evidence of chorio-epithelioma could be detected in the organ after removal. The specimen and a microscopical section was demonstrated as an illustration of the form of case in which chorio-epithelioma is cured by curettage.

A meeting (clinical evening) of the New South Wales Branch was held at the B.M.A. Building, 30-34 Elizabeth-street, Sydney, on November 13, 1914, Dr. Litchfield in the chair.

Dr. J. P. Hastings read a paper on "Empyema of the Gall Bladder." The patient was a man, aged 57 years. His past history was as follows: 2½ years previously he was seized with a sudden attack of pain in the upper part of the abdomen. The pain had been preceded by nausea and slight dizziness. He had suffered from flatulence for about 12 months before this attack. The flatulence became worse after the attack, which lasted for one hour. Three further attacks of pain had taken place within the past two years. He stated that pain was produced if he lay on his left side. On October 21, 1914, he was again seized with pain late at night, immediately after drinking a glass of cold water. The pain was severe and accompanied by retching. He vomited two hours later. At 7 a.m. on the following day he complained of severe pain. The respiratory rate was 20, the pulse rate 84, and the temperature 98.4° F. His expression was drawn and anxious. There was a slight fulness over the region of the gall bladder. The right rectus muscle was on guard, but a swelling could be palpated on the right side at the end of the ninth rib. The area of the swelling was dull to percussion, and this dulness was continuous with the liver dulness. The diagnosis made was enlarged gall bladder, with a stone in the neck of the bladder or in the cystic duct. The differential diagnosis had to be made from perforated gastric ulcer, which was placed out of court on account of the patient's age, the absence of relief from discomfort on taking food, the fact that the right rectus muscle was not tense, and there was no free fluid in the abdominal cavity. Perforated duodenal ulcer was also considered unlikely on account of the rapid onset after the taking of the cold water, and also because the feeling of fulness and heaviness usually sets in about 1½ to 2 hours later. Appendicitis was excluded in view of the fact that the pulse rate and temperature were scarcely disturbed 8½ hours after the onset. Acute pancreatic cyst is usually associated with vomiting and collapse, and the pain is severe in acute pancreatitis. The cyst does not move with respiration, and a space between the cyst and the liver usually exists, which is resonant on percussion. At first he was treated symptomatically with fomentations, bismuth and barley water taken by mouth. No improvement took place, and as the temperature was rising, he was removed to hospital and subjected to operation. The pulse rate increased in frequency before the operation. The gall bladder was found to be much distended, and several ounces of mucus and pus were evacuated. A stone was impacted in the neck of the bladder. The gall bladder was drained, and an uneventful recovery followed. Dr. Hastings pointed out that the patient did not show the least trace of jaundice, and there were no rigors. He stated that in gall stones, early operation is the only good form of treatment. When flatulence persists, it is no use giving bicarbonate of sodium for an indefinite period. In over 80 per cent. of gall stone cases no jaundice was noted. Even when a stone is impacted in the common duct jaundice may be absent. He wished to call attention to the fact that in his case tenderness was elicited on Murphy's percussion. This sign was capable of helping the surgeon to distinguish between lesions of the kidney, gall bladder and appendix. He maintained that the distinguishing clinical feature of gall stones was not jaun-

dice, but long-continued recurrent indigestion. The midnight, or early morning attack of cholelithiasis is almost pathognomonic. The stone was demonstrated.

Dr. Binnie remarked that in his opinion impaction of a stone in the common bile duct was always associated with jaundice. He could not see how it could be otherwise. As long as the stone was moving about, it could produce a variety of symptoms, but no jaundice, but when it became actually impacted, the flow of bile must be arrested. He was struck with the unusual shape of the calculus in Dr. Hastings' case. He suggested that the knobbed, crenated appearance was due to the repeated attacks. The stone probably shifted about in the gall bladder, and fresh deposits on cholesterol had the effect of building up the small processes. In regard to Dr. Hastings' remarks about appendix dyspepsia, he would content himself by remarking that he did not believe in its existence.

Dr. R. H. Todd thanked Dr. Hastings for his interesting communication, more especially since another meeting was taking place at the same time at the University Club, which was attracting the majority of the members, who were in the habit of attending the clinical evenings of the Branch.

In his reply, Dr. Hastings was quite prepared to accept Dr. Binnie's explanation of the curiously shaped stone. He had not been able to suggest a satisfactory explanation.

In the absence of Dr. Leslie Macintosh, Dr. Hastings read a few short notes on a case of hemiplegia due to syphilitic thrombosis of the middle cerebral artery. The patient was a young man aged 25 years, who had contracted syphilis five years previously. He was at the time in Liverpool. Although the chancre developed during the voyage to Australia, he was not treated until he arrived in Sydney, when he was given mercury and chalk in tablet form, and later had received injections of mercury at the Coast Hospital. On October 13, 1914, he felt a tingling in his left leg, and at 11 p.m. he could neither walk nor stand. He noticed that his speech was affected, and that his mouth was drawn on one side. Six days later the knee jerks to the left side were exaggerated, there was a positive Babinski reflex and well marked ankle clonus, and the left pupil was dilated. The patient stated that he had been suffering from headache for eight weeks, during three of which the ache was situated on the top of the head, and during the latter five weeks it was frontal. He had become deaf five days before the onset of the hemiplegia. Since the onset the headache had become occipital. He had had some epistaxis before the stroke. The treatment adopted was the administration of potassium iodide in doses of 30 grains and mercury. The paralytic symptoms had cleared up almost entirely, but a loss of memory for names was still noticeable. In regard to the pathology of the condition, he was satisfied, in spite of the fact that no Wassermann test had been carried out, that the affection was luetic and that it was a thrombosis of the branches of the middle cerebral artery.

Dr. Darling agreed with the diagnosis, but thought that the lesion was cortical. He pointed out that at times the syphilitic virus appeared to give rise to nervous lesions with some regularity. He instanced the case of a woman who was infected, and who passed the disease on to three other persons. In each case syphilis of the central nervous system developed. In the one case the patient developed general paralysis of the insane, in another the affection was a tabeseparesis and in the third it was a definite locomotor ataxy. Some authorities had stated that syphilis was incurable, unless the treatment was commenced within three months of the infection. He was doubtful whether this view should be accepted. The speaker had studied many cases of cerebral syphilitic affections in which no secondary symptoms had been manifested. It was curious that it was not possible to render the Wassermann reaction negative, either with salvarsan or with mercury.

Dr. Litchfield also agreed with the diagnosis in Dr. Macintosh's case. He was, however, inclined to place the thrombosis in the cortical branches. He spoke of his experience of the pathological anatomy of cases of syphilitic hemiplegia. In one case, the hemiplegia had developed and regressed, but an acute exacerbation had taken place, the patient had rapidly become comatose and had died. In this case the thrombosis was found in the arteries in the cortex. Referring to Dr. Darling's suggestion that certain

strains of spirochaetes produced lesions in the nervous system, he was rather inclined to believe that the theory recently put forward was more probable. This was that the implication of any special system was due to a stress of function. In lead poisoning, the over-use of the forearm decided the localization of the palsy; in locomotor ataxy the over-use of the legs determined the type of syphilitic disease. He enquired of Dr. Darling whether the patients who developed cerebral lesions were brain workers, and received the reply that they were medical students. This reply was satisfactory to Dr. Litchfield. The frequency of implication of the palate, eye, heart and respiration in tertiary syphilitic manifestations was to be explained by the facts that these systems were in constant functional activity.

Replying, Dr. Hastings stated that in Dr. Mackintosh's case, secondary symptoms were not marked. The patient had complained of sore throat, and had noticed a few spots, but the history was not clear. He was interested in Dr. Litchfield's explanation of the determination of nervous lesions in syphilis.

MEDICO-POLITICA.

At a meeting of the South Australian Branch, held at the Lister Hall, Adelaide, on October 29, 1914, Dr. E. W. Morris, the President, in the chair, the matter of the Friendly Society's Dispensary at Port Adelaide, was discussed. The Chairman explained that when the United Friendly Societies' Dispensary was established in Adelaide some three years ago a breach occurred between its leaders and the medical men who had been previously acting as surgeons to the Lodges concerned, which resulted in members of the British Medical Association refusing to act as surgeons to those Lodges which entered the dispensary. Recently the leaders of the dispensary movement approached the medical men of Port Adelaide, representing that as regards the branch of the dispensary in that district, a condition of affairs would shortly arise which, in their opinion, would render it possible to heal the breach in that district, if the local men were willing to negotiate with them. If this opportunity were allowed to pass they felt that the breach would be widened.

The medical men asked as a guarantee of good faith on the part of the dispensary that if any agreement were made it should be for a lengthy period. They stated that no proposed agreement would be satisfactory to them unless they contained the following conditions:—

(1) The complete severance of the Port Adelaide Dispensary from the United Friendly Societies' Dispensary in Adelaide.

(2) The removal of any medical officer at present acting for the Dispensary.

(3) The provision of machinery for representation of the medical men to supervise the Dispensary and to settle minor disputes in connexion with representatives of the Dispensary.

(4) The Dispenser to be a registered pharmaceutical chemist.

(5) The acceptance of the principle of an income limit.

(6) Operations other than those included in the ordinary Lodge agreements to be a matter of private arrangement between patient and medical attendant.

These conditions were ungrudgingly accepted, and the Dispensary authorities in addition voluntarily agreed in the future to employ none but members of the British Medical Association. Owing to the onset of the war during the progress of the negotiations some difficulty was experienced in adjusting financial and other details. Finally an agreement for five years was concluded, with a tentative arrangement for an allowance by the medical men of 15 per cent. off current Lodge rates to the Dispensary for the supply of medicines during the continuance of the war. Subsequently this and other minor details may be reconsidered, but the term of five years and the income limit clause are not to be re-considered.

The Council of the South Australian Branch had approved this agreement, which has been signed by the medical men of Port Adelaide, and accepted by the Dispensary. It will come into force on December 1, 1914.

The following persons have been nominated for membership of the New South Wales Branch:—

Pr. J. Inglis Robertson, Lismore

Dr. J. Inglis Robertson, Lismore.  
Dr. Thomas Butler, Arnold Street, Killara.

**BRITISH MEDICAL ASSOCIATION (AUSTRALIA)  
MILITARY MOTOR AMBULANCE FUND.**

The Honorary Secretary of the Federal Committee, Dr. G. H. Abbott, has received, during the week ending November 17, 1914, the sum of £329/19/2, as subscriptions to the Military Motor Ambulance Fund. It is hoped that the amount subscribed in the ensuing week will exceed this sum, and will reach four figures. The total up to date is £606/6/6.

### **Second List.**

		s.	d.
Dr. Hoets, J., Glebe .. . . . .		1	0
" McMurray, W., Sydney .. . . .		1	0
" Sinclair, Eric, Sydney .. . . .		2	0
" Stephen, E. M., Ashfield .. . . .		2	0
" Douglas, T. S., Tamworth .. . . .		1	0
" Brown, R. E., St. Kilda, Vic. .. . . .		1	0
" Crook, A. A., North Melbourne .. . . .		2	0
" Davis, M. C., Violet Town, Vic. .. . . .		1	0
" Embley, E. M., Melbourne .. . . .		1	0
" Greig, Jane, Melbourne .. . . .		1	6
" Hutchinson, F., Daylesford, Vic. .. . . .		1	0
" McAdam, R., St. Kilda, Vic. . . .		1	2
" Pollock, John, Queenscliff, Vic. .. . . .		1	0
" Weigall, G., Elsternwick, Vic. .. . . .		1	0
" McDonnell, A. J., Toowoomba, Q. . . .		3	0
" Stewart, H. P., Brisbane .. . . .		1	2
" Reid, J. McP., Richmond, Vic. . . .		1	6
" Featherstonhaugh, C., Williamstown, Vic. . . .		1	0
" McCallum, G., Geelong, Vic. . . .		1	0
" Sawrey, E. R., Melbourne .. . . .		10	11
" Greenham, E. C., Brisbane .. . . .		2	2
" Dolman, E., Gatton, Q. . . .		1	0
" MacKenzie, J. and J. A., Glen Innes .. . . .		2	6
" Huggart, W. C., Helensburgh .. . . .		3	0
" Vance, E. B., Leeton .. . . .		1	0
" O'Hara, A. A., Darlنجhurst .. . . .		3	0
" Warren, H. Guy, Sydney .. . . .		5	0
" Baur, F. S., Newcastle .. . . .		1	6
" Johnson, J. M., Melbourne .. . . .		10	1
" Watson, Roy, Melbourne .. . . .		1	0
" Cox, F. S., South Yarra .. . . .		1	0
" Stawell, R. R., Melbourne .. . . .		3	0
" Turnbull, H. H., Melbourne .. . . .		50	0
" Stone, Clara, Melbourne .. . . .		0	10
" Maclean, Donald, Brighton, Vic. .. . . .		1	0
" Thomas, F. C., Canterbury, Vic. .. . . .		1	0
" Shuter, R. E., Melbourne .. . . .		1	2
" McKeddie, R. S., St. George, Q. . . .		1	6
" Douglas, F. J., Victor Harbour, S.A. . . .		1	2
" Spring, J. P., Carlton, Vic. .. . . .		1	0
" Syme, G. A., Melbourne .. . . .		1	0
" Cole, G. S., Geelong .. . . .		1	6
" Borthwick, F. H., Kensington, S.A. . . .		2	0
" Patterson, M., Ipswich, Q. . . .		1	0
" Wigg, H. H., Adelaide .. . . .		1	0
" Scott, Malcolm, Mount Barker, S.A. . . .		10	0
" Drummond and Burston, S.A. . . .		2	0
" May, H. T. H., Bundaberg, Q. . . .		5	5
" Shaw, Helen, Toowong, Q. . . .		1	0
" Connolly, T. P., Toowoomba, Q. . . .		1	0
" Michod, T. H., Longreach, Q. . . .		1	0
" McClelland, R. E., Newtown.. . . .		2	0
" Hodgkinson, R., Coonamble .. . . .		1	0
" Llewellyn, Rees, Haberfield .. . . .		1	0
" Best, Alban, Heyfield, Vic. . . .		0	10
" Smith, Eric, Port Macquarie.. . . .		1	6
" Tate, M. E., West Tamar, Tas. . . .		0	10
" Gault, A. H., Lower Mitcham, S.A. . . .		1	0
" Magarey, C., Norwood, S.A. . . .		10	0
" Mawson, W., Campbelltown .. . . .		1	0
" Hughes, James, Sydney .. . . .		1	0
" Powell, A. H., Colac, Vic. . . .		2	0
" Sutcliffe, W. E., Morwell, Vic. . . .		1	6
" Hewlett, H., Fitzroy, Vic. . . .		0	10
" Harkness, E., Lang Lang, Vic. . . .		1	0

Dr. Harper, Margt., Sydney	1	1	0
" Parry, A. E., Rockhampton	2	0	0
" Hardie, David, Brisbane	2	2	0
" Clatworthy, C. H., Gladstone, Q.	1	1	0
" Lee, H. H., Wollongong	2	2	6
" Allen, Alex., Katoomba	2	2	9
" Shaw, P., Kew, Vic.	10	0	0
" Birks, M., Broken Hill	1	0	0
" Burnard, R. G., Narracoorie	0	10	6
" Gethring, E. J., Port Adelaide	1	1	0
" Smith, D. C., South Yarra	2	2	0
" Davis, G. J., Beaconsfield	1	1	6
" Harvey, W. A., Hobart	1	1	0
" Jay, H. M., Adelaide	1	1	0
" Sewell, S. W., Melbourne	5	5	0
" Anderson, B. A., Westbury, Tas.	10	0	0
" Park, Joseph, Corrimal	2	2	0
" Morgan, A. M., Adelaide	1	1	0
" Dawson, D. D., Port Pirie	2	2	0
" Morris, E. W., South Australia	1	1	0
" McArthur, G. A., Melbourne	1	0	0
" Watson, A., Adelaide	1	0	0
" Hone, F. S., Semaphore, S.A.	5	5	0
" Humphrey, E., Townsville, Q.	5	6	0
" Beet, W. A., Beautesert, Q.	2	2	0
" Hamilton, H. A., Queenstown, Tas.	1	1	0
" Smith, G., Walton, Paddington	1	1	0
" Brady, A. J., Sydney	2	2	0
" Scott, J. A., Hawthorn, Vic.	2	2	0
" Harris, S., Harrie, Enmore	5	5	0
" Beatty, H. R., Braidwood	1	1	6
" Busby, H., Bathurst	1	1	0
" Orford, R. J., Stroud	1	1	6
" Gullett, Lucy, Sydney	1	1	0
" Tomlins, W. H., Alstonville	1	1	6
" Morton, J., Sydney	3	3	0
" Mills, A. E., Sydney	3	3	0
" Asher, M., Sydney	1	1	0
" Culpin, M., Taringa, Q.	1	0	0
" Davies, L., Nagambie, Vic.	1	0	0
" Read, S. D., Horsham, Vic.	1	1	0
" Sprowlers, C. A., East Melbourne	1	1	0
" Stanley, H. B., Melbourne	1	1	0
" Hayes, H. A., Warragul, Vic.	1	1	0
" Ingham, J. H. J., Dimboola	1	1	0
" Von Lukowitz, M., Adelaide	5	6	0
" Smith, O. W., Clare, S.A.	1	1	6
" Magarey, R. E., Atherton, Q.	5	0	6
" Toft, W. H., Campbell Town, Tas.	0	10	0
" Anderson, S. M., Franklin, Tas.	1	1	0
" Robertson, D. J. R., Childers, Q.	1	0	0
" Carvosso, A. B., Brisbane	2	3	0
" Harlin, F. M. and R., Killarney, Q.	2	3	0
" Wallace, T. J., Longreach, Q.	1	1	0
" Lloyd, C. H., Warwick, Q.	1	1	6
" James, W. A., Wallaroo, S.A.	1	1	0
" Wooster, F. C., Rockhampton	1	1	6
" Alport, G., Dover, Tas.	1	1	0
" Payne, W. S., Brisbane	1	1	0
" Parry, H. D., Picton	1	1	6
" Connell, M., Hawker, S.A.	1	0	0
" Mackay, E. A., Toorak, Vic.	5	0	0
" Blaxland, M. B., Freemantle	1	1	0
" Parker, G. M., Swansea, Tas.	0	10	6
" Todd, R. H., Sydney	20	0	0
" Begg, Wm., Camden Haven	1	1	6
" Kirkwood, W. L., Wollongong	1	1	0
" Humphreys, S. E., Footscray, Vic.	0	10	6
" Holmes, H. G., Mosman	1	1	0
" Lawton, F. B., Melbourne	1	1	0
" Loughrey, B., Hawthorn, Vic.	1	2	0
" Weld, J. C., Dromana, Vic.	0	11	0
" Michell, R. T., Molong	1	1	0
" Perkins, M., Morpeth	1	1	0
" McKillop, L., Blackall, Q.	1	1	6

## Public Health.

### HEALTH OF VICTORIA.

During the fortnight ended November 10, 1914, the following returns have been received from the Department of Public Health, Victoria:—

Whole State—	Enteric Fever.	Diphtheria.	Scarlet Fever.	Pulmonary Tuberculosis.
Cases .. .	11	148	16	75
Deaths .. .	—	5	—	19
Metropolis—				
Cases .. .	2	66	11	58
Deaths .. .	—	4	—	11

The number of diphtheria cases notified from the various municipalities for the fortnight ended November 10, 1914, were as follows:—

Municipality.	Cases.
Bendigo .. .	12
Prahran .. .	9
Omeo .. .	7
Strathfieldsaye .. .	7

### HEALTH OF NEW SOUTH WALES.

The following notifications have been received during the fortnight ending November 9, 1914, by the Department of Public Health, New South Wales:—

Enteric Fever.	Scarlet Fever.	Diphtheria.
Cases.	Deaths.	Cases.

Metropolitan Combined Districts .. .	105	66
Hunter River Combined Districts .. .	14	7
Remainder of State .. .	37	102
City of Sydney and Metropolitan District .. .	6	
Country—Campbelltown .. .	1	
Total .. .	7	

Among the cases of enteric fever, 13 occurred in Broken Hill, 4 in Orange and 3 in Bellata Camp (Namoi Shire). Six of the scarlet fever cases occurred in Hay, 6 in Lithgow and 4 in Millthorpe (Lyndhurst Shire). The largest aggregation of diphtheria cases was at Broken Hill, where there were 17 cases. There were 10 at Tibooburra and 8 at Adaminaby.

### SMALL-POX IN SYDNEY.

The number of small-pox cases reported to the Department of Public Health during the week ended November 15, 1914, was:—

Cases.	
City of Sydney and Metropolitan District .. .	
Country—Campbelltown .. .	
Total .. .	7

### INFECTIVE DISEASES IN WESTERN AUSTRALIA.

The following notifications have been received by the Department of Public Health, Western Australia:—

#### Notifications received for the week ending October 10, 1914.

Enteric Fever.	Diphtheria.	Scarlet Fever.	Beri Beri.
Fever.	Theria.	Fever.	Phthisis.
Fremantle East .. .	1	—	—
Subiaco .. .	2	—	1
Perth .. .	3	—	—
Perth North .. .	—	1	—
Guildford West .. .	1	—	—
Kalgoorlie .. .	2	—	—
Gosnells .. .	1	—	—
Nunyle .. .	1	—	—
Laverton .. .	—	—	1
Broome .. .	—	—	2
Total .. .	5	6	4

**Notifications received for the week ending October 17, 1914.**

	Enteric Fever.	Diph- theria.	Scarlet Fever.	Ery- thema.	Phthisis.	Sipelas.	Septi- cæmia.
Fremantle .	1 ..	1 ..	1 ..	1 ..	—	—	—
F'm'ntle N. .	— ..	1 ..	—	—	—	—	—
Subiaco ..	— ..	2 ..	—	—	—	—	—
Leederville. .	1 ..	—	—	—	—	1 ..	—
Perth ..	3 ..	1 ..	—	—	1 ..	—	—
Guildford ..	1 ..	—	—	—	—	—	—
Midland J. .	— ..	—	—	—	—	—	1
Kalgoorlie .	2 ..	—	—	—	—	—	—
Boulder ..	— ..	1 ..	—	—	—	—	—
Osborne ..	— ..	1 ..	—	—	—	—	—
Nedlands ..	— ..	—	—	—	—	—	1
Leonora ..	1 ..	—	—	—	—	—	—
Busselton ..	1 ..	—	—	—	—	—	—
Total ..	10 ..	7 ..	1 ..	2 ..	1 ..	2	—

**Notifications received for the week ending October 24, 1914.**

	Enteric Fever.	Diph- theria.	Ery- thema.	Phthisis.	Sipelas.
Fremantle ..	— ..	2 ..	1 ..	—	—
Cottesloe ..	— ..	1 ..	1 ..	—	—
Claremont ..	— ..	—	—	2 ..	—
Subiaco ..	— ..	—	1 ..	—	—
Perth ..	— ..	1 ..	1 ..	3 ..	1
Maylands ..	— ..	—	1 ..	—	—
Guildford West ..	— ..	—	1 ..	—	—
Guildford ..	— ..	—	—	1 ..	—
Midland Junction ..	— ..	1 ..	—	—	—
Kalgoorlie ..	— ..	—	1 ..	—	—
Boulder ..	— ..	—	3 ..	—	—
Coolgardie ..	— ..	—	—	2 ..	—
Gosnells ..	— ..	—	1 ..	—	—
Nannup ..	— ..	—	—	1 ..	—
Perth West ..	— ..	—	1 ..	—	—
Mount Hawthorne ..	— ..	—	1 ..	—	—
Beaconsfield ..	— ..	—	1 ..	—	—
Golden Gate ..	— ..	1 ..	—	—	—
Jennacubbine ..	— ..	1 ..	—	—	—
Broome ..	— ..	—	—	1 ..	—
Northam ..	— ..	1 ..	—	—	—
Sandstone ..	— ..	1 ..	—	—	—
Total ..	— ..	9 ..	14 ..	10 ..	1

**Notifications received for the week ending October 30, 1914.**

	Enteric Fever.	Diph- theria.	Septi- cæmia.	Phthisis.	caemias.
Cottesloe Beach ..	— ..	—	—	1 ..	—
Subiaco ..	— ..	—	1 ..	—	—
Leederville ..	— ..	1 ..	—	—	—
Perth ..	— ..	1 ..	—	—	1 ..
Perth North ..	— ..	—	1 ..	—	—
Kalgoorlie ..	— ..	3 ..	2 ..	—	—
Boulder ..	— ..	—	7 ..	—	—
Perth West ..	— ..	1 ..	—	—	—
Beverley ..	— ..	—	—	1 ..	—
Bolgart ..	— ..	—	—	1 ..	—
Toodyay ..	— ..	—	1 ..	—	—
Kurrawang ..	— ..	—	—	1 ..	—
Bunbury ..	— ..	1 ..	—	—	—
Wagin ..	— ..	1 ..	—	—	—
Black Range ..	— ..	—	—	1 ..	—
Perth East ..	— ..	—	—	1 ..	—
Katanning ..	— ..	—	—	1 ..	—
Total ..	— ..	8 ..	12 ..	8 ..	1

**INFECTIVE DISEASES IN PERTH.**

During the four weeks ending November 2, 1914, the following notifications were received by the City Health Officer for Perth, Western Australia:—

	Cases.
Enteric Fever ..	7
Diphtheria ..	3
Tuberculosis ..	8
Total ..	18

**During the corresponding period of last year:—**

	Cases.
Enteric Fever ..	7
Diphtheria ..	8
Tuberculosis ..	8
Erysipelas ..	2
Scarlatina ..	1
Continued Fever ..	1
Total ..	27

**INFECTIVE DISEASE IN QUEENSLAND.**

The following notifications have been received by the Department of Public Health, Queensland, during the week ended November 7, 1914:—

Notifiable Disease.	Cases.
Enteric Fever ..	27
Diphtheria ..	68
Varicella ..	31
Phthisis ..	8
Erysipelas ..	5
Scarlet Fever ..	2
Puerperal Fever ..	2
Infantile Paralysis ..	14
Total ..	157

**Medical News.****THE ROYAL ALEXANDRA HOSPITAL FOR CHILDREN,  
SYDNEY.**

An urgent appeal for funds is being made by the Committee of the Royal Alexandra Hospital for Children, Sydney. The hospital, as is well known, does most excellent work, and in the interests of the suffering little ones of Sydney every means must be adopted to keep all its wards open. We are informed that the financial position of the institution is serious, and that unless the charitable are inclined to respond to the call, parts of the hospital will have to be closed. We would suggest that medical practitioners should bring this matter to the notice of some of their rich patients, in order that this calamity to the sick children of Sydney may be overcome.

The Board of Management of the Royal Alexandra Hospital for Children, at Camperdown, is seeking a Chief Resident Medical Officer. The post is exceptionally suitable for a young graduate who wishes to specialize in children's diseases. The importance of obtaining wide experience in this class of practice should be emphasized, since the capabilities of a general practitioner in the eyes of the public is frequently gauged by his skill in handling children and by his knowledge of diseases peculiar to the young.

**Correspondence.****IMPRISONMENT OR CASTRATION?**

Sir.—In your journal of August 8, Dr. de Griffiths refers to a male human who sexually assaulted a young girl, and asks whether this man should not have been castrated instead of imprisoned. One must, in such cases, be able to answer the important question, Would castration keep him from making a similar assault? I fear it would not. Very probably in this male his action was due to a diseased brain, and the attack was the peripheral action due to a central disease. We are not in a position to state definitely that sexual impulses and desires are due to the presence of the testes. I think they are not. We must differentiate between (1) sexual desire, (2) sexual power, and (3) power to impregnate. Anyone of these may be present in the degenerate without the other. In China, for instance, it is not unusual for the totally castrated male to "keep" one or several females as his wives. The old male toying with the young child is a case showing desire and not power.

Reverting to the above case, and with the view of showing that the local action of this male was probably due to a central disease, I would mention the case of adult male masturbators. Several of these have asked me to

sterilize them, and I have always refused to sanction this, because I feel the local action is due to a mental or brain disorder. And, further, that if this male were cured of this act, he would only adopt some other morbid action. It is the same with male sexual inverters. If they cease to be active sods, it is more than possible they will become passive ones.

Dr. de Griffiths raises the old question of suggesting castration as a punishment. I am sorry he does so. My contention is that doctors should, as far as possible, not interfere with the question of legal punishments. Our scope of action should be confined, as much as possible, to health and disease. If we doctors begin to introduce as treatment of any mental or physical disease, punishment, then we step back to the middle ages! When in 1903 I proposed that we should be justified in acting with mental degenerates so that they could neither beget nor conceive, by ligaturing and dividing the vasa or the fallopian tubes, I meant that we must adopt some non-punishment plan. I am glad to state that up to this date no less than twelve State legislatures in the U.S.A. have adopted my proposal. Those taking a practical interest in this big question can obtain full details upon my proposals in my book, "Race Culture: or Race Suicide" (W. Scott & Co.)

Yours, etc.,

Liverpool,

October 4, 1914.

Yours, etc.,

R. R. RENTOUL, M.D.

#### B.M.A. BUILDING (SYDNEY) DEBENTURES.

Sir.—The Sydney and Suburban Provident Medical Association are desirous of purchasing £500 in B.M.A. building debentures. For this reason I would be glad to hear from any members wishing to transfer their holdings to that amount.

DONALD LUKER,

Hon. Treasurer,

Sydney and Suburban Medical Association.

November 10, 1914.

### Medical Appointments Vacant.

#### GLADSTONE HOSPITAL, QUEENSLAND.

Applications are hereby invited for the position of Matron to the Gladstone Hospital. Salary £80 per annum. Uniforms provided; also one month's holiday per annum on full pay.

Applicants to state age and previous experience. Must be A.T.N.A. Certificates, accompanied with testimonials.

Applications to be sent to the Secretary on or before Tuesday, the 1st December, 1914.

By Order Board of Management,

J. T. W. BROWN,

Secretary, Gladstone Hospital, Q.

### Medical Appointments.

Dr. Max Yuille has been appointed Senior Resident Medical Officer at the Fremantle Public Hospital, Western Australia.

Dr. J. Ignatius Parer has been appointed Junior Resident Medical Officer at the Fremantle Public Hospital, Western Australia.

Dr. W. J. Langley has been appointed Acting District Medical Officer and Public Vaccinator, Pingelly, Western Australia, during the absence of Dr. Corley.

Dr. John Walker has been appointed Acting Medical Officer to the Kalgoorlie Road Board, during the temporary absence of Dr. J. G. Macmillan.

The following have been appointed Medical Referees at Western Australia, under Section 13 of "The Workers' Compensation Act, 1912":—

Drs. Robinson, T. H. Albany; Butler, F. S.; Beverley; Dean E. C.; Bridgetown; Loneragan, T. J.; Barrabup; Goldstein, A.; Broome; Flynn, I. J.; Bunbury; Robertson, L.; Bussleton; Gordon, V. H.; Carnarvon; Rigby, W. H.; Collie; Gurdon, E. J.; Derby; Langley, W. J.; Pingelly; Bartlett, G. H.,

Dongarra; Cantor, S. J.; East Kirup; Adams, A. R.; Esperance; Hungerford, L. M. T.; Geraldton; Pope, E. Campbell; Gnowangerup; McShane, C.; Greenbushes; Cockey, E. P.; Goomballing; Prins, H. M.; Jarrahdale; House, F. M.; Katanning; Hodge, W. T.; Kellerberrin; Triado, A. J. J.; Marble Bar; Beveridge, W. J.; Meckering; Myles, W. S.; Moora; George, I.; Mornington; Deane, A. D.; Mt. Barker; Lewis, J. B.; Narrogin; Laws, H. L.; New Norcia; Hussey, B.; Newcastle; Rockett, R. N.; Northam; Boyd, T. C.; Northampton; Joyce, C.; Pinjarra; Brown, D.; Port Hedland; O'Meara, P. M.; Southern Cross; Lovegrove, F. T. A.; Tamboorup; Nutting, P. H.; Wagin; Moloney, P. J.; Wickepin; Davis, S. B.; York.

### Proceedings of Australasian Medical Board.

#### QUEENSLAND.

The following have been registered under the provisions of the "Medical Act of 1867" as duly qualified medical practitioners:—

Jones, Maud Sydney, Brisbane, M.B., Ch.M. (Syd.), 1914.

Manery, William Joseph, Mackay, M.B. (Syd.), 1914.

### Important Notice.

Medical practitioners are requested not to apply for any appointment referred to in the following table, without having first communicated with the Honorary Secretary of the Branch named in the first column, or with the Medical Secretary of the British Medical Association, 429 Strand, London, W.C.

Branch.	APPOINTMENTS.
QUEENSLAND. (Hon. Sec. B.M.A. Building, Adelaide Street, Brisbane).	Brisbane United F.S. Institute. F.S. Lodges at Longreach. F.S. Lodges at Warwick.
WESTERN AUSTRALIA. (Hon. Sec. 230 St. George's Terrace, Perth).	Swan District Medical Officer. All Contract Practice Appointments in W.A.
NEW SOUTH WALES. (Hon. Sec. 30-34 Elizabeth Street, Sydney).	Australian Natives Association. Balmain United F.S. Dispensary. Burwood District F.S. Institute. Goulburn F.S. Association. Leichhardt and Petersham Dispensary. M.U. Oddfellows Med. Inst., Elizabeth Street, Sydney. N.S.W. Ambulance Association and Transport Brigade. N. Sydney United F.S.
SOUTH AUSTRALIA. (Hon. Sec. 3 North Terrace, Adelaide).	People's Prudential Benefit Society. Phoenix Mutual Provident Society. F.S. Lodges at Braidwood. F.S. Lodges at Casino. F.S. Lodges at Lithgow. F.S. Lodges at Mudgee. F.S. Lodges at Orange. F.S. Lodges at Parramatta, Granville, Penrith and Auburn. Killingworth Colliery, Newcastle. Seaham Colliery No. 1, Newcastle. Seaham Colliery No. 2, Newcastle. West Wallsend Colliery, Wallsend.

#### EDITORIAL NOTICES.

Manuscripts forwarded to the office of this Journal cannot under any circumstances be returned.

Original articles forwarded for publication are understood to be offered to "The Medical Journal of Australia" alone, unless the contrary be stated.

All communications should be addressed to "The Editor," "Medical Journal of Australia," B.M.A. Building, 30-34 Elizabeth Street, Sydney, New South Wales.